CDX-F5550

SERVICE MANUAL

AEP Model
UK Model

Ver. 1.0 2005.01

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-611TA-186//Q
Optical Pick-up Name	KSS1000E

SPECIFICATIONS

CD player section

Signal-to-noise ratio	120 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV, LW: 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

General

Outputs	Audio outputs terminal (front, sub/rear switchable) Power aerial relay control terminal Power amplifier control terminal
Inputs	Telephone ATT control terminal BUS control input terminal BUS audio input terminal Remote controller input terminal Aerial input terminal
Tone controls	Low: ±10 dB at 60 Hz (XPLOD) Mid: ±10 dB at 1 kHz (XPLOD) High: ±10 dB at 10 kHz (XPLOD)
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 178 × 50 × 181 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Card remote commander RM-X151

US and foreign patents licensed from Dolby Laboratories.

Note

This unit cannot be connected to a digital preamplifier or an equalizer which is Sony BUS system compatible.

Design and specifications are subject to change without notice.

FM/MW/LW COMPACT DISC PLAYER

9-879-407-01
2005A04-1
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e Vehicle Company
Published by Sony Engineering Corporation

SONY®

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

TEST DISCS

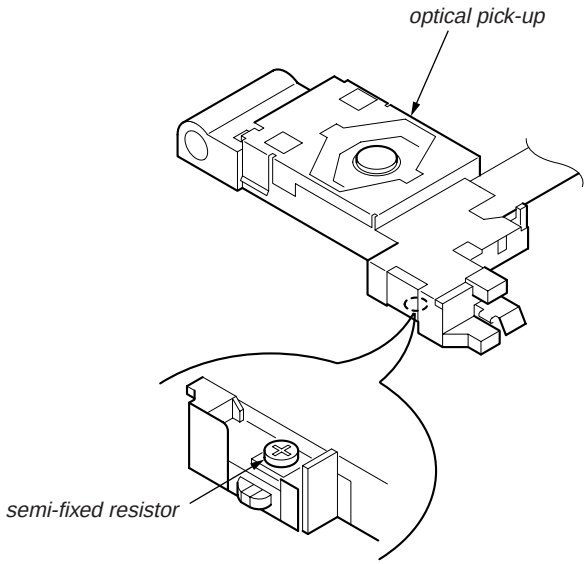
This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

CD-R test disc TCD-R082LMT (Part No. J-2502-063-1)
CD-RW test disc TCD-W082L (Part No. J-2502-063-2)

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

• CD Playback:
You can play CD-DA (also containing CD TEXT*[1]), CD-R/CD-RW (MP3 files also containing Multi Session and ATRAC CD (ATRAC3 and ATRAC3plus format).

Type of discs	Label on the disc
CD-DA	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 ATRAC CD	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

*1 A CD TEXT disc is a CD-DA that includes information such as disc, artist and track name.

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

• Connect the MAIN board (CN350) and the SERVO board (CN2) with the extension cable (Part No. J-2502-076-1).

● UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

• Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350 °C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

• Strong viscosity
Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

• Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

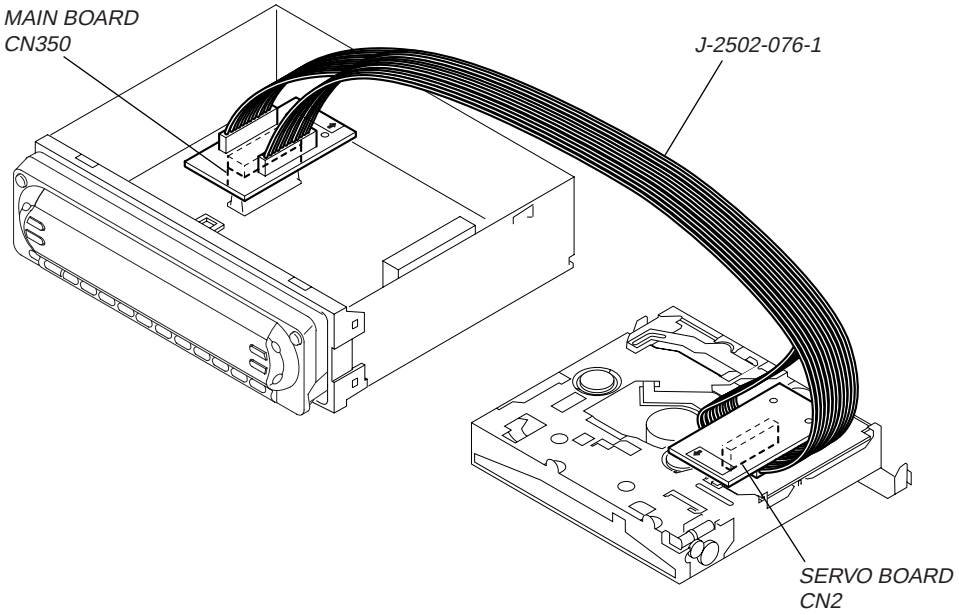


TABLE OF CONTENTS

1. GENERAL

Location of Controls 5
Connections 5

2. DISASSEMBLY

2-1. Sub Panel Assy 8
2-2. CD Mechanism Block 8
2-3. Main Board 9
2-4. Chassis (T) Sub Assy 9
2-5. Roller Arm Assy 10
2-6. Chassis (OP) Assy 10
2-7. Optical Pick-up 11
2-8. SL Motor Assy (M902) 11
2-9. LE Motor Assy (M903) 12
2-10. Servo Board 12

3. DIAGRAMS

3-1. Block Diagram –CD Section– 13
3-2. Block Diagram –Main Section– 14
3-3. Block Diagram –Display Section– 15
3-4. Circuit Boards Location 16
3-5. Printed Wiring Boards –CD Mechanism Section– 17
3-6. Schematic Diagram –CD Mechanism Section (1/2)– 18
3-7. Schematic Diagram –CD Mechanism Section (2/2)– 19
3-8. Printed Wiring Board –Main Section– 20
3-9. Schematic Diagram –Main Section (1/2)– 21
3-10. Schematic Diagram –Main Section (2/2)– 22
3-11. Printed Wiring Board –Sub Section– 23
3-12. Schematic Diagram –Sub Section– 23
3-13. Printed Wiring Board –Key Section– 24
3-14. Schematic Diagram –Key Section– 25

4. EXPLODED VIEWS

4-1. Main Section 32
4-2. Front Panel Section 33
4-3. CD Mechanism Section (1) 34
4-4. CD Mechanism Section (2) 35
4-5. CD Mechanism Section (3) 36
4-6. CD Mechanism Section (4) 37

5. ELECTRICAL PARTS LIST 38

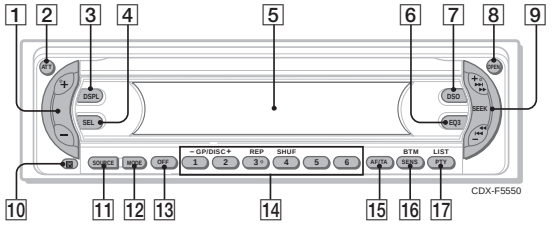
SECTION 1
GENERAL

This section is extracted from instruction manual.

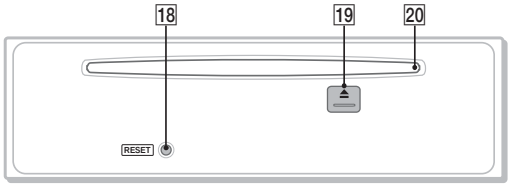
• LOCATION OF CONTROLS

Location of controls and basic operations

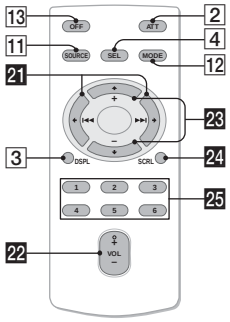
Main unit



Front panel removed



Card remote commander RM-X151



Refer to the pages listed for details. The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 **Volume +/– button**
To adjust volume.

2 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

3 **DSPL (display) button** 4, 8, 12
To change display items.

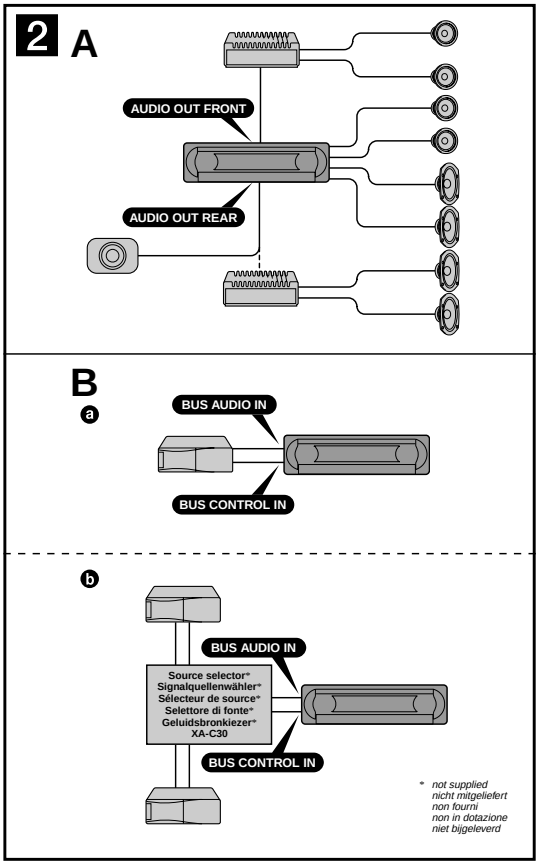
4 **SEL (select) button** 4, 11, 12
To select items.

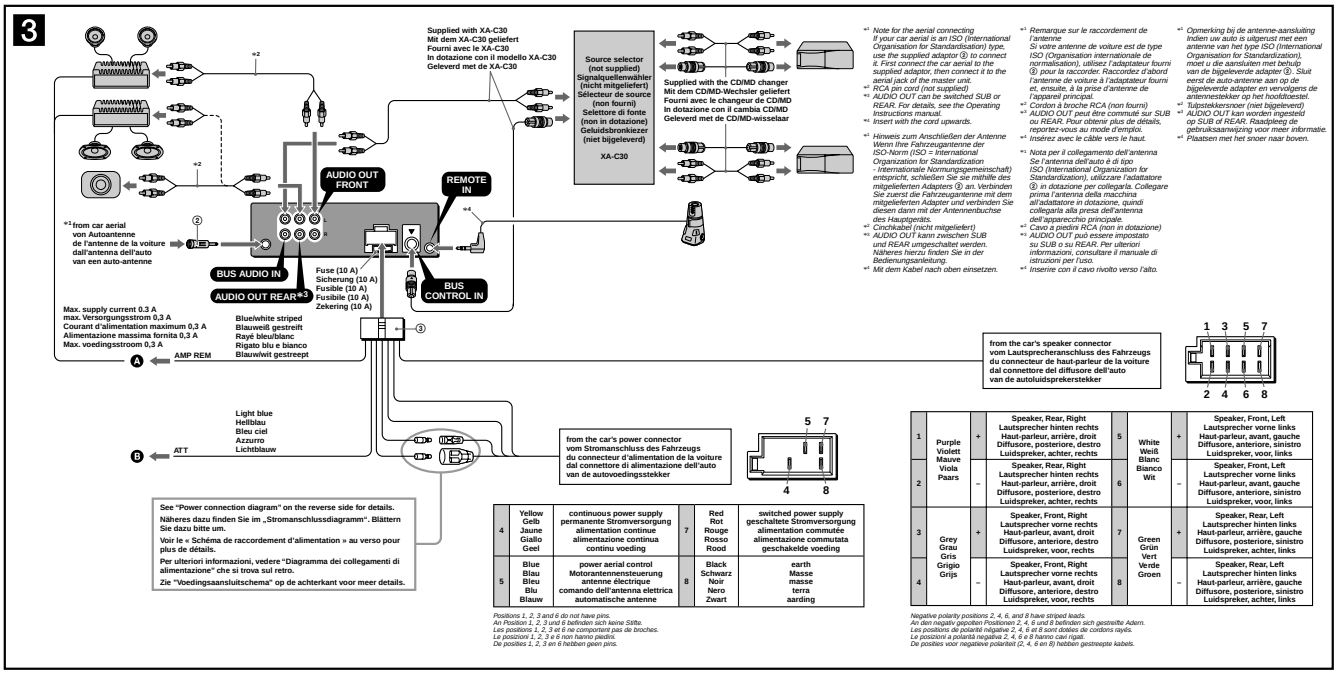
5 **Display window**

6 **EQ3 (equalizer) button** 2, 11
To select an equalizer type (XPLOD, VOCAL, CLUB, JAZZ, NEW AGE, ROCK, CUSTOM or OFF).

6

• CONNECTIONS




3
Supplied with XA-C30
Mit dem XA-C30 geliefert
Fourni avec le XA-C30
In dotazione con il modello XA-C30
Geleverd met de XA-C30
Source selector (not supplied)
Signaalbronkiezer (niet bijgeleverd)
XA-C30
Supplied with the CD/MD changer
Mit dem CD/MD-Wechsler geliefert
Fourni avec le changeur de CD/MD
In dotazione con il cambia CD/MD
Geleverd met de CD/MD-wisselaar
AUDIO OUT FRONT
REMOTE IN
BUS AUDIO IN
AUDIO OUT REAR
BUS CONTROL IN
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Zekering (10 A)
Max. supply current 0.3 A
max. Versorgungsstrom 0,3 A
Courant d'alimentation maximum 0,3 A
Alimentazione massima fornita 0,3 A
Max. voedingsstroom 0,3 A
Blue/white striped
Blauweiß gestreift
Rayé bleu/blanc
Rigato blu e bianco
Blauw/wit gestreept
AMP REM
Light blue
Hellblau
Bleu ciel
Azzurro
Lichtblauw
ATT
from the car's power connector
vom Stromanschluss des Fahrzeugs
du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsstekker
from the car's speaker connector
vom Lautsprecheranschluss des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore del diffusore dell'auto
van de autoluidsprekerstekker
See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im „Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le « Schéma de raccordement d'alimentation » au verso pour plus de détails.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.

4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
5	Blue Blau Bleu Blu Blauw	power aerial control Motorantennensteuerung antenne électrique comando dell'antenna elettrica automatische antenne	
7	Red Rot Rouge Rosso Rood		
8	Black Schwarz Noir Nero Zwart	earth Masse masse terra aarding	

1	Purple Violett Mauve Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

Negative polarity positions 2, 4, 6, and 8 have striped leads.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.

Note for the aerial connecting
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor Ⓐ to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
RCA pin cord (not supplied)
AUDIO OUT can be switched SUB or REAR. For details, see the Operating Instructions manual.
Insert with the cord upwards.

Hinweis zum Anschließen der Antenne
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters Ⓐ an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
Cinchkabel (nicht mitgeliefert)
AUDIO OUT kann zwischen SUB und REAR umgeschaltet werden. Näheres hierzu finden Sie in der Bedienungsanleitung.
Mit dem Kabel nach oben einsetzen.

Remarque sur le raccordement de l'antenne
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni Ⓐ pour la raccorder. Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
Cordon à broche RCA (non fourni)
AUDIO OUT peut être commuté sur SUB ou REAR. Pour obtenir plus de détails, reportez-vous au mode d'emploi.
Insérez avec le câble vers le haut.

Nota per il collegamento dell'antenna
Se l'antenna dell'auto è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore Ⓐ in dotazione per collegarla. Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
Cavo a piedini RCA (non in dotazione)
AUDIO OUT può essere impostato su SUB o su REAR. Per ulteriori informazioni, consultare il manuale di istruzioni per l'uso.
Inserire con il cavo rivolto verso l'alto.

Opmerking bij de antenne-aansluiting
Indien uw auto is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de bijgeleverde adapter Ⓐ. Sluit eerst de auto-antenne aan op de bijgeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.
Tulpstekkersnoer (niet bijgeleverd)
AUDIO OUT kan worden ingesteld op SUB of REAR. Raadpleeg de gebruiksaanwijzing voor meer informatie.
Plaatsen met het snoer naar boven.

Connection example (2)

***Notes* (2-A)**
- *Be sure to connect the earth lead before connecting the amplifier.*
- *The alarm will only sound if the built-in amplifier is used.*

***Tip* (2-B-D)**
For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Connection diagram (3)

A To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

B To the interface cable of a car telephone

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting lead ③ may damage the aerial.

Notes on the control power and supply leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner, or when you activate the AF (Alternative Frequency) or TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Anschlussbeispiel (2)

***Hinweise* (2-A)**
- *Schließen Sie unbedingt zuerst das Massekabel an, bevor Sie den Verstärker anschließen.*
- *Der Warnton wird nur ausgegeben, wenn der integrierte Verstärker verwendet wird.*

***Tipp* (2-B-D)**
Zum Anschließen von zwei oder mehr CD/MD-Wechslern wird der gesondert erhältliche Signalquellenwähler XA-C30 benötigt.

Anschlussdiagramm (3)

A An AMP REMOTE IN des gesondert erhältlichen Endverstärkers
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

B An Schnittstellenkabel eines Autotelefons

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel ③ die Antenne beschädigt werden.

Hinweise zu den Steuer- und Stromversorgungsleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert +12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen
Wenn Lautsprecher und Verstärker nicht richtig angeschlossen sind, erscheint „FAILURE" im Display. Vergewissern Sie sich in diesem Fall, dass Lautsprecher und Verstärker richtig angeschlossen sind.

Exemple de raccordement (2)

***Remarques* (2-A)**
- *Raccordez d'abord le câble de mise à la masse avant de connecter l'amplificateur.*
- *L'alarme est émise uniquement lorsque l'amplificateur intégré est utilisé.*

***Conseil* (2-B-D)**
Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le sélecteur de source XA-C30 (en option) est indispensable.

Schémas de raccordement (3)

A Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.

B Vers le cordon de liaison d'un téléphone de voiture

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ③ risque d'endommager l'antenne.

Remarques sur les câbles de commande et d'alimentation
- *Le câble de commande (bleu) fournit du courant continu de +12 V lorsque vous mettez le tuner sous tension ou lorsque vous activez la fonction AF (fréquence alternative) ou TA (informations de circulation).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW (GO)/LW (PO) intégrée dans la vitre arrière/latérale, raccordez le câble de commande d'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au bornier de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le câble de commande d'antenne jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas raccorder le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Connecter uniquement des haut-parleurs passifs. La connexion de haut-parleurs actifs (avec des amplificateurs intégrés) aux bornes des haut-parleurs pourrait endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les enceintes et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les enceintes et l'amplificateur sont raccordés correctement.

Esempio di collegamento (2)

***Note* (2-A)**
- *Assicurarsi di collegare il cavo di terra prima di collegare l'apparecchio all'amplificatore.*
- *Tale segnale viene emesso solo se è in uso l'amplificatore incorporato.*

***Suggerimento* (2-B-D)**
Per collegare due o più cambia CD/MD, si deve utilizzare il selettore di fonte XA-C30 (opzionale).

Schema di collegamento (3)

A A AMP REMOTE IN di un amplificatore di potenza opzionale
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.

B Al cavo di interfaccia di un telefono per auto

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione ③, si potrebbe danneggiare l'antenna elettrica se questa non dispone di scatola a relè.

Note sul cavi di controllo e di alimentazione
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore oppure la funzione TA (notiziario sul traffico) o AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il filo (rosso) di ingresso dell'alimentazione accessoria al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venire danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sui collegamenti
Se l'amplificatore e il diffusore non sono collegati correttamente, "FAILURE" viene visualizzato nel display. In tal caso, accertarsi che l'amplificatore e il diffusore siano collegati correttamente.

Voorbeeldaansluitingen (2)

***Opmerkingen* (2-A)**
- *Sluit eerst de aarddraad aan voordat u de versterker aansluit.*
- *U hoort de pieptoon alleen als de ingebouwde versterker wordt gebruikt.*

***Tip* (2-B-D)**
Om twee of meer CD/MD-wisselaars aan te sluiten, hebt u de geluidsbronkiezer XA-C30 (optioneel) nodig.

Aansluitschema (3)

A Naar AMP REMOTE IN van een optionele eindversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het apparaat worden beschadigd.

B Naar het interface-snoer van een autotelefoon

Waarschuwing

Indien u een elektrische antenne hebt zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer ③ de antenne beschadigen.

Opmerkingen over de bedienings- en voedingskabels
- *De antennevoedingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt of de AF (Alternative Frequency) of TA (Traffic Announcement) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/zijruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaiskast te gebruiken.*

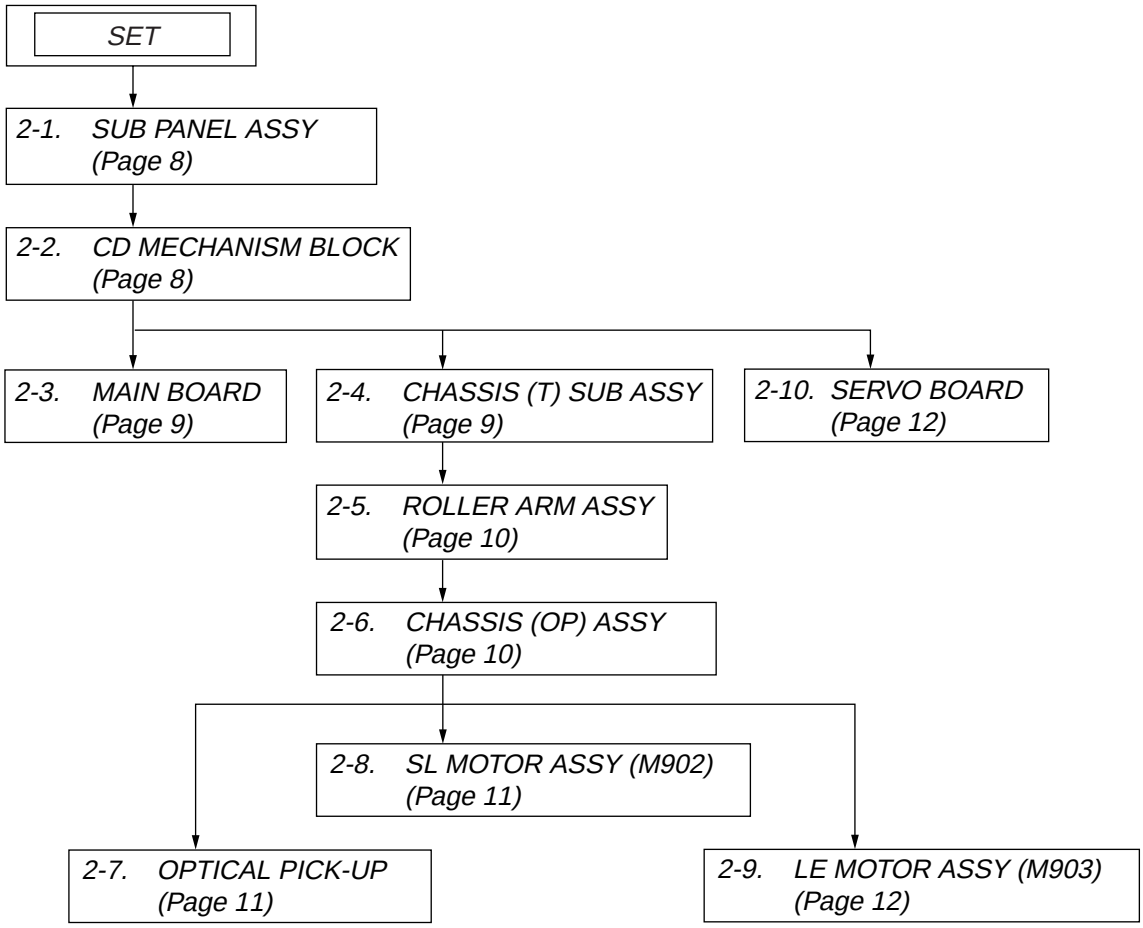
Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter- en linkerluidspreker niet op elkaar aan.*
- *Verbind de aarddraad van dit apparaat niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter- en linkerluidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Opmerking over aansluiten
Als de luidspreker en versterker niet correct zijn aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidspreker en versterker correct zijn aangesloten.

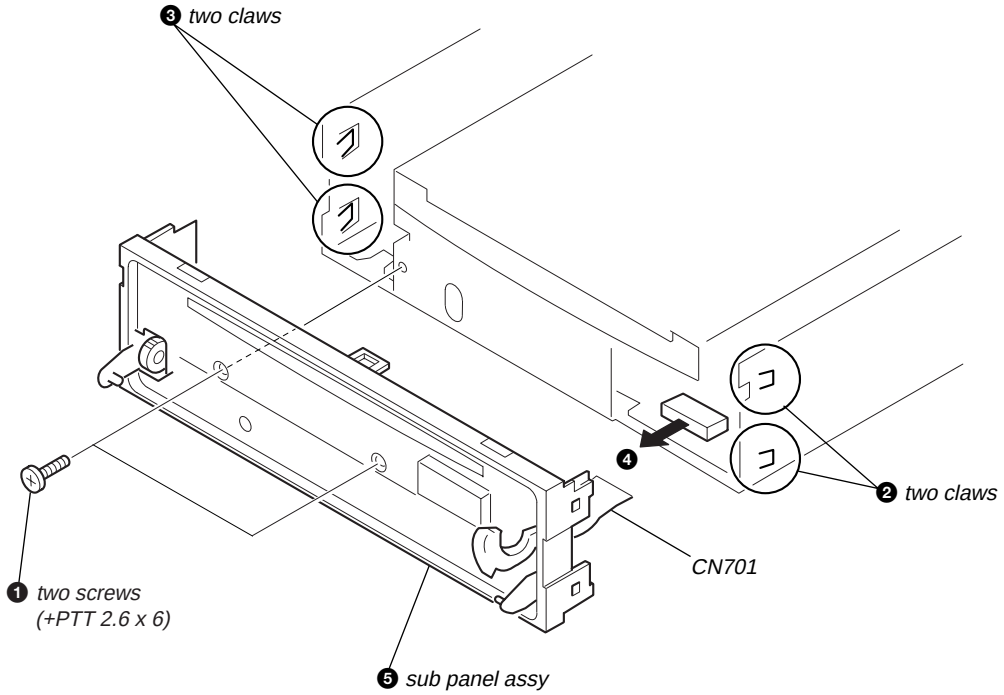
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

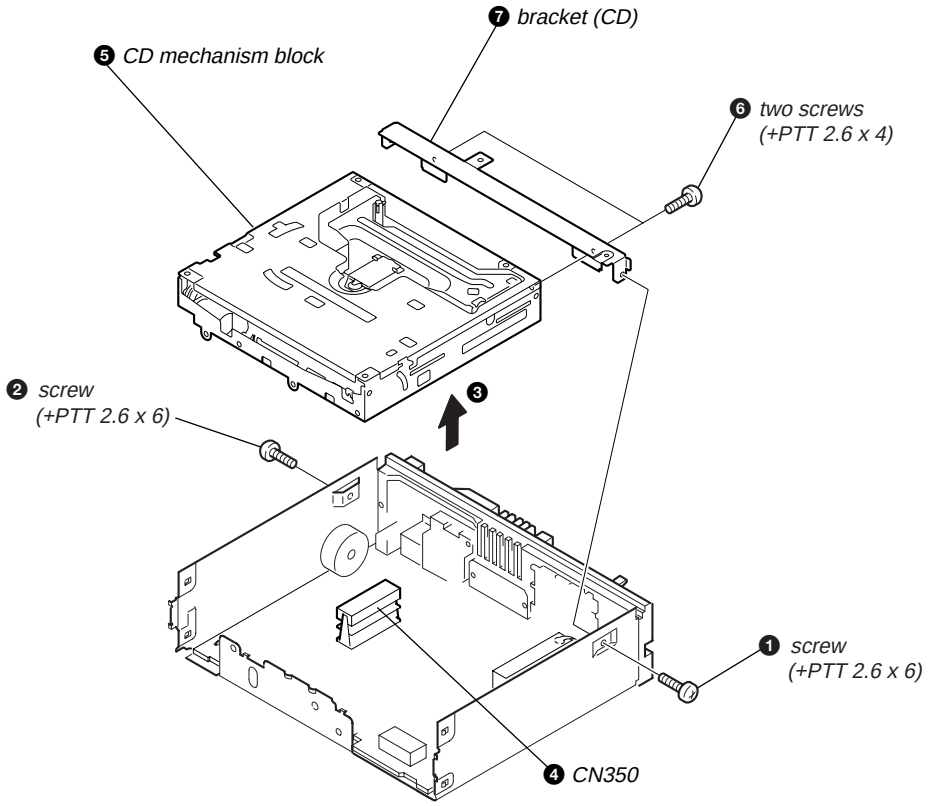

SET
2-1. SUB PANEL ASSY (Page 8)
2-2. CD MECHANISM BLOCK (Page 8)
2-3. MAIN BOARD (Page 9)
2-4. CHASSIS (T) SUB ASSY (Page 9)
2-10. SERVO BOARD (Page 12)
2-5. ROLLER ARM ASSY (Page 10)
2-6. CHASSIS (OP) ASSY (Page 10)
2-8. SL MOTOR ASSY (M902) (Page 11)
2-7. OPTICAL PICK-UP (Page 11)
2-9. LE MOTOR ASSY (M903) (Page 12)

Note : Follow the disassembly procedure in the numerical order given.

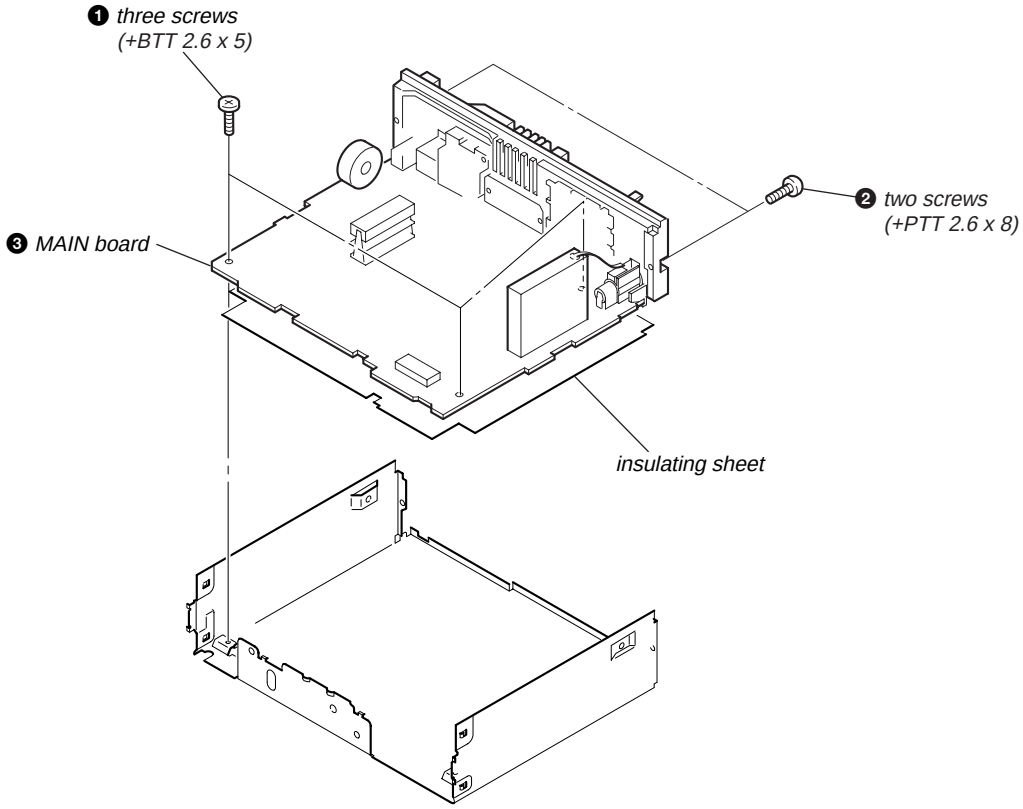
2-1. SUB PANEL ASSY



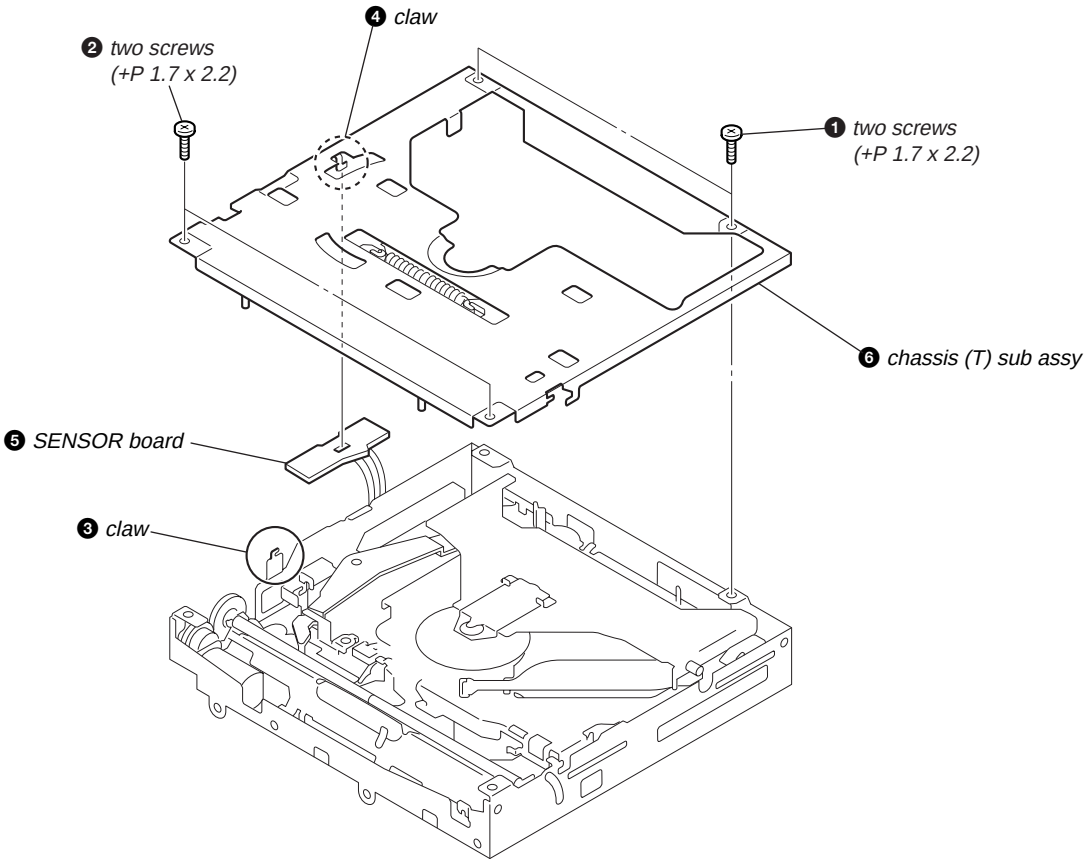
2-2. CD MECHANISM BLOCK



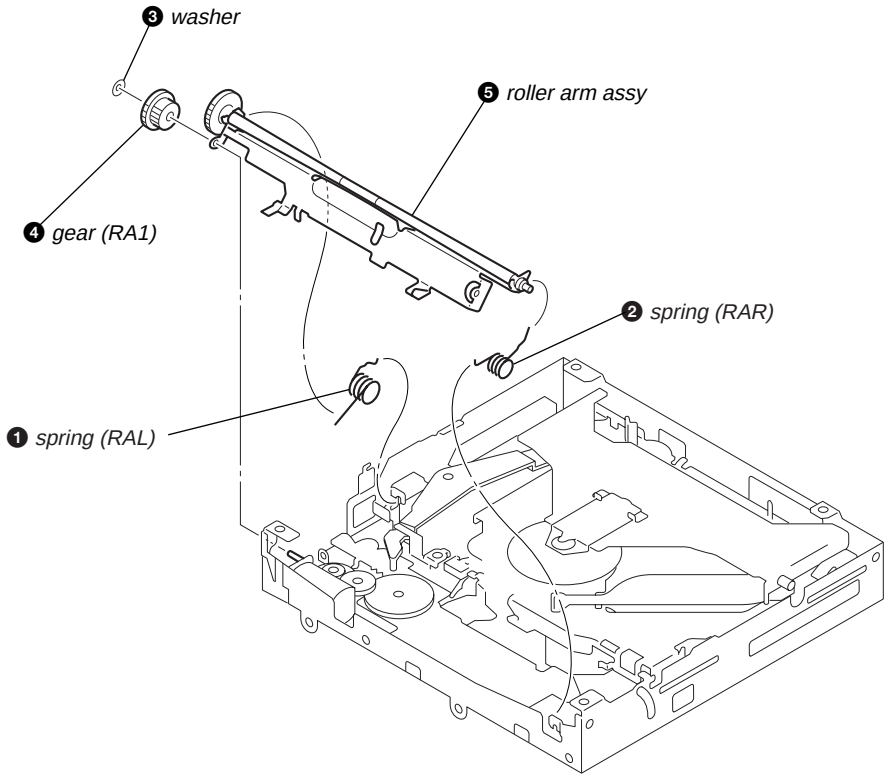
2-3. MAIN BOARD



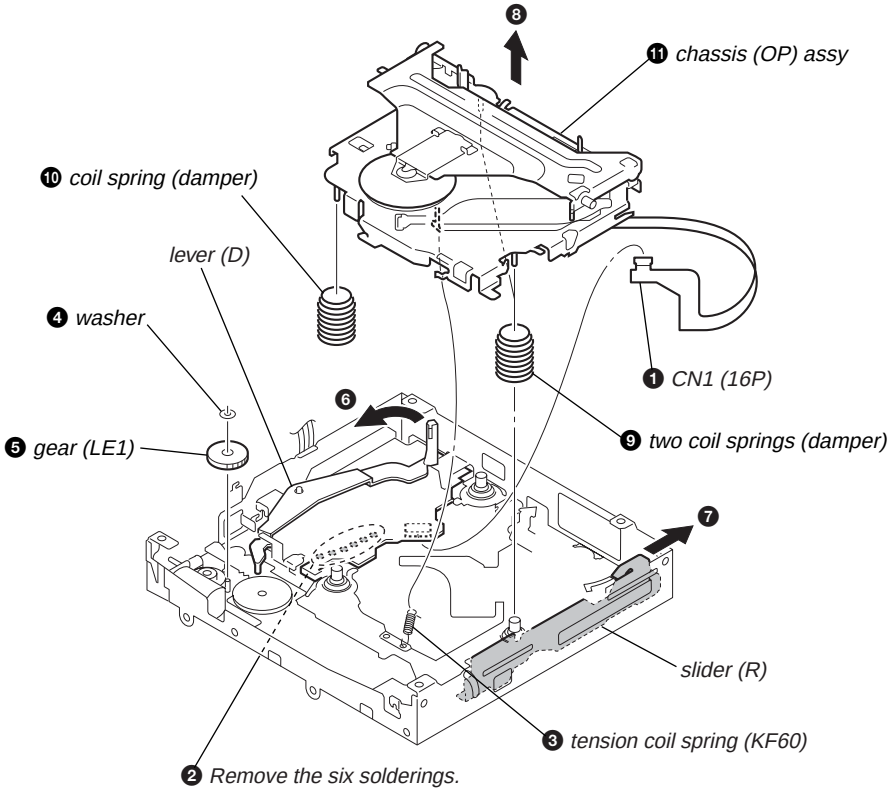
2-4. CHASSIS (T) SUB ASSY



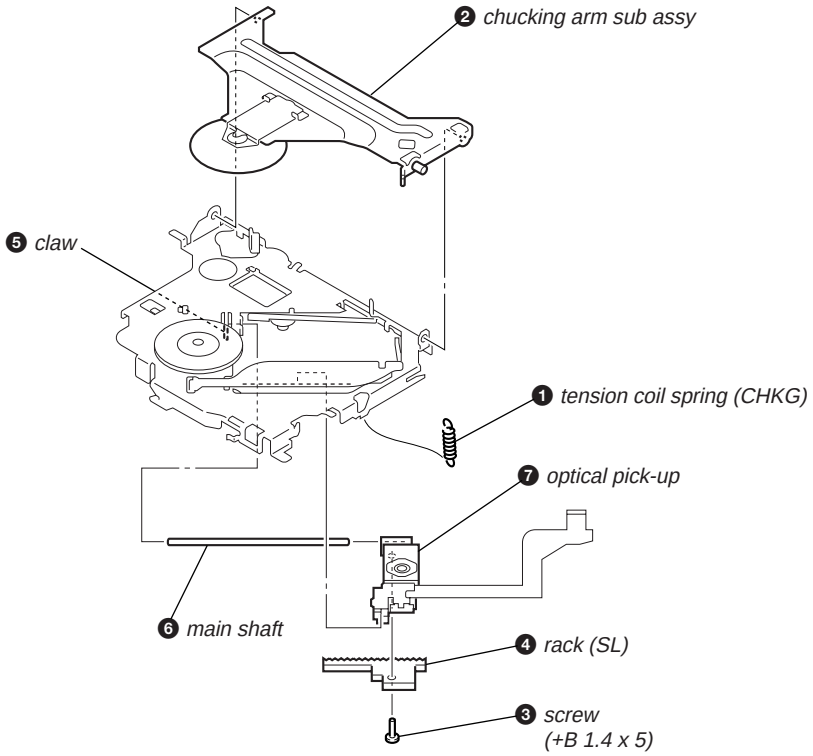
2-5. ROLLER ARM ASSY



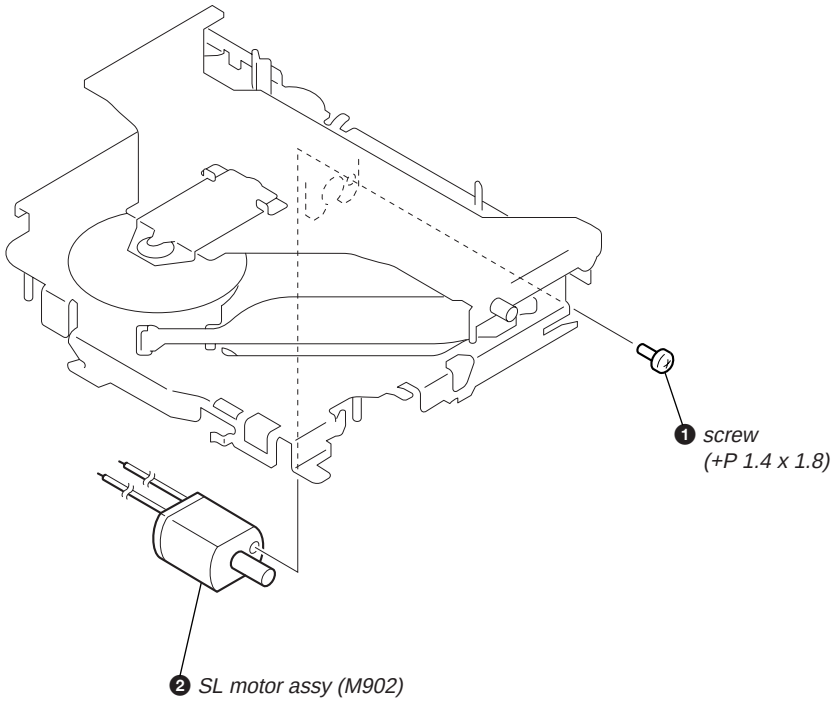
2-6. CHASSIS (OP) ASSY



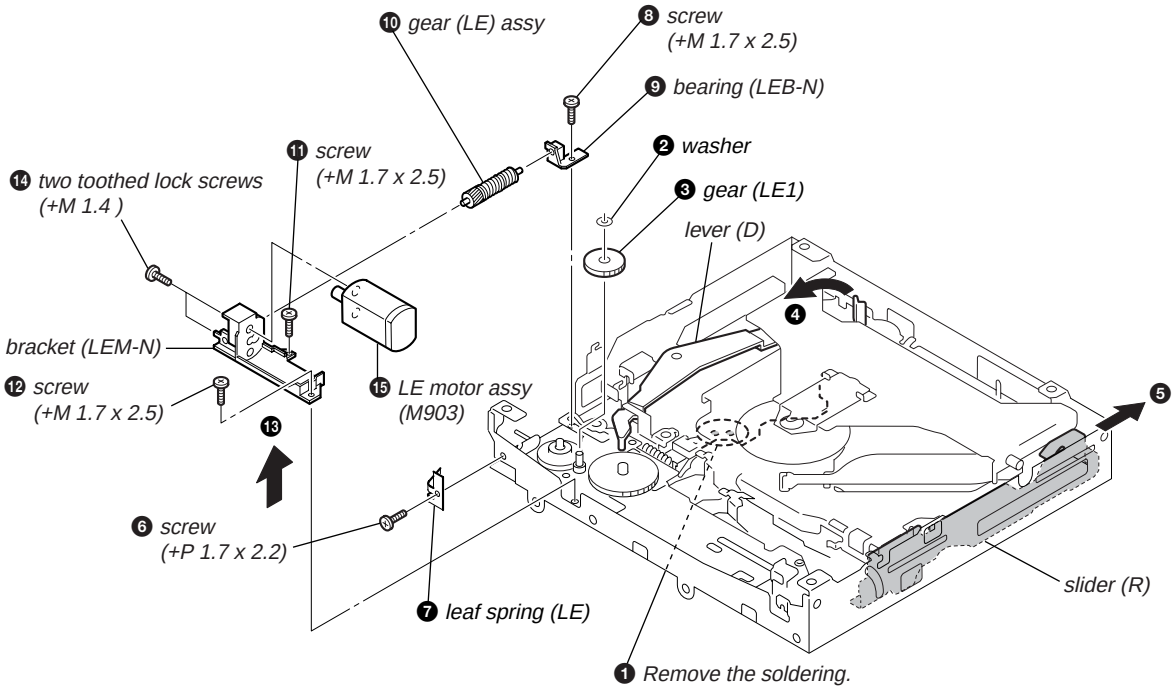
2-7. OPTICAL PICK-UP



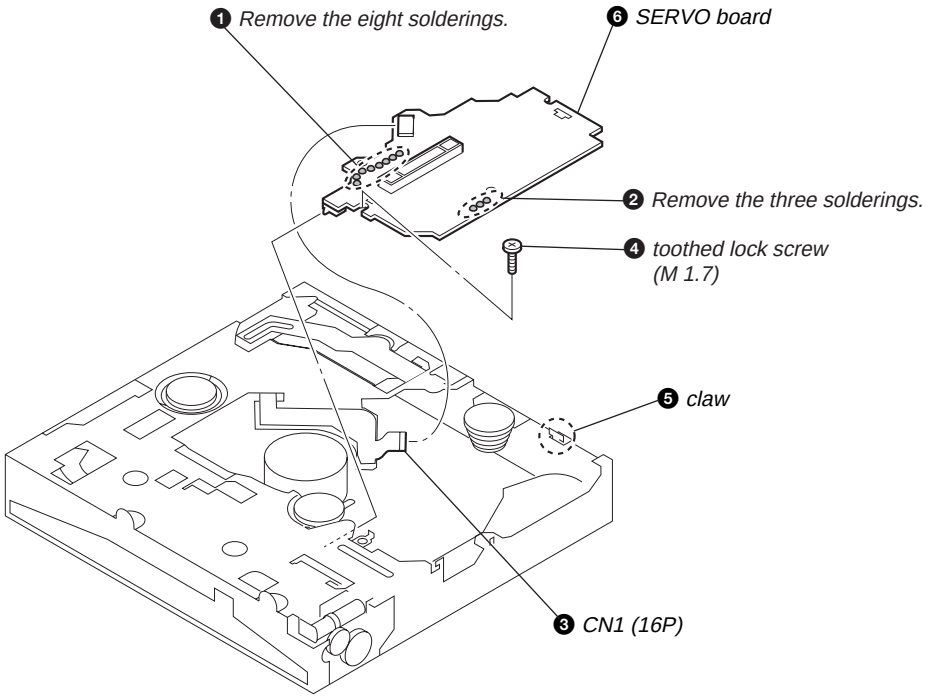
2-8. SL MOTOR ASSY (M902)



2-9. LE MOTOR ASSY (M903)

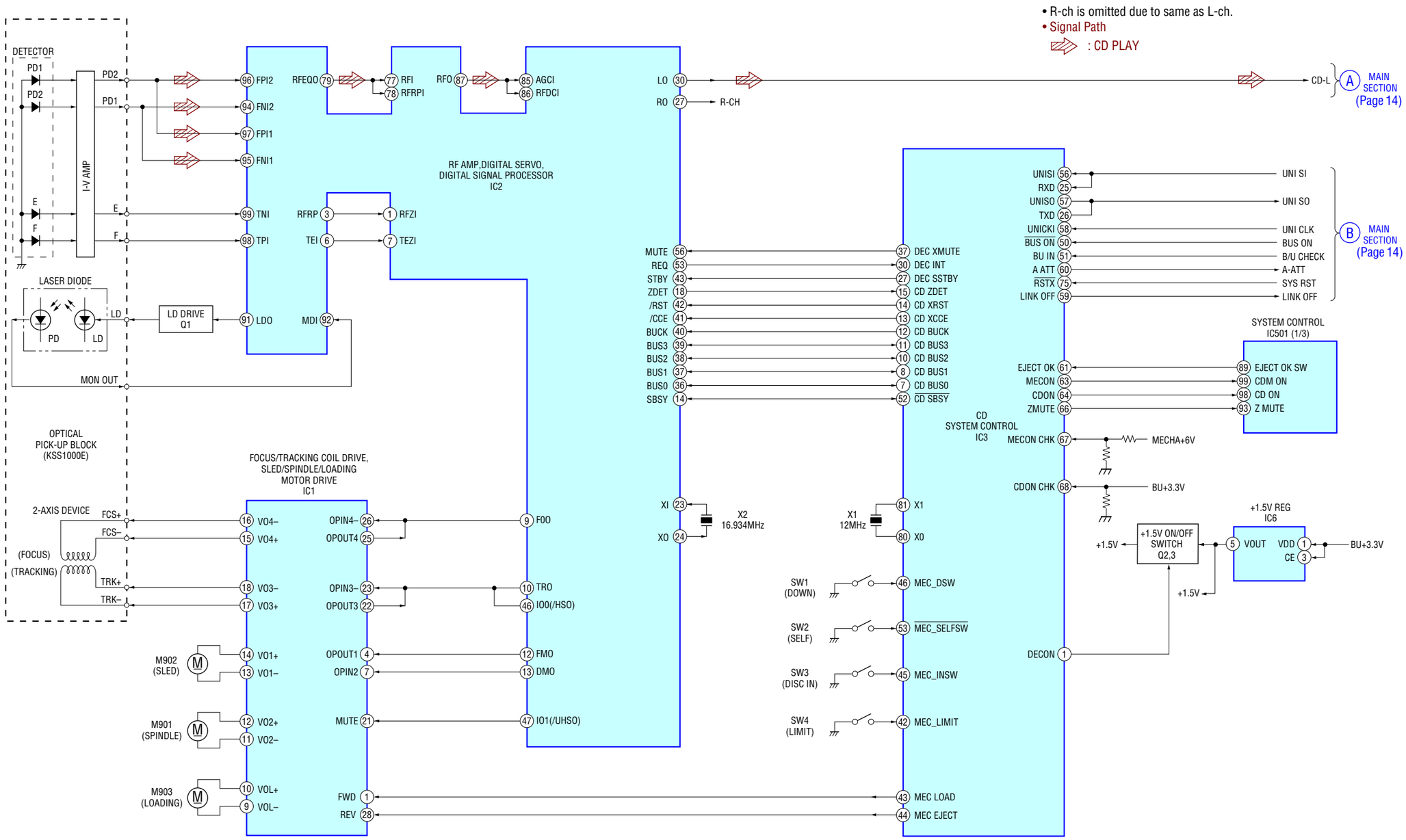


2-10. SERVO BOARD

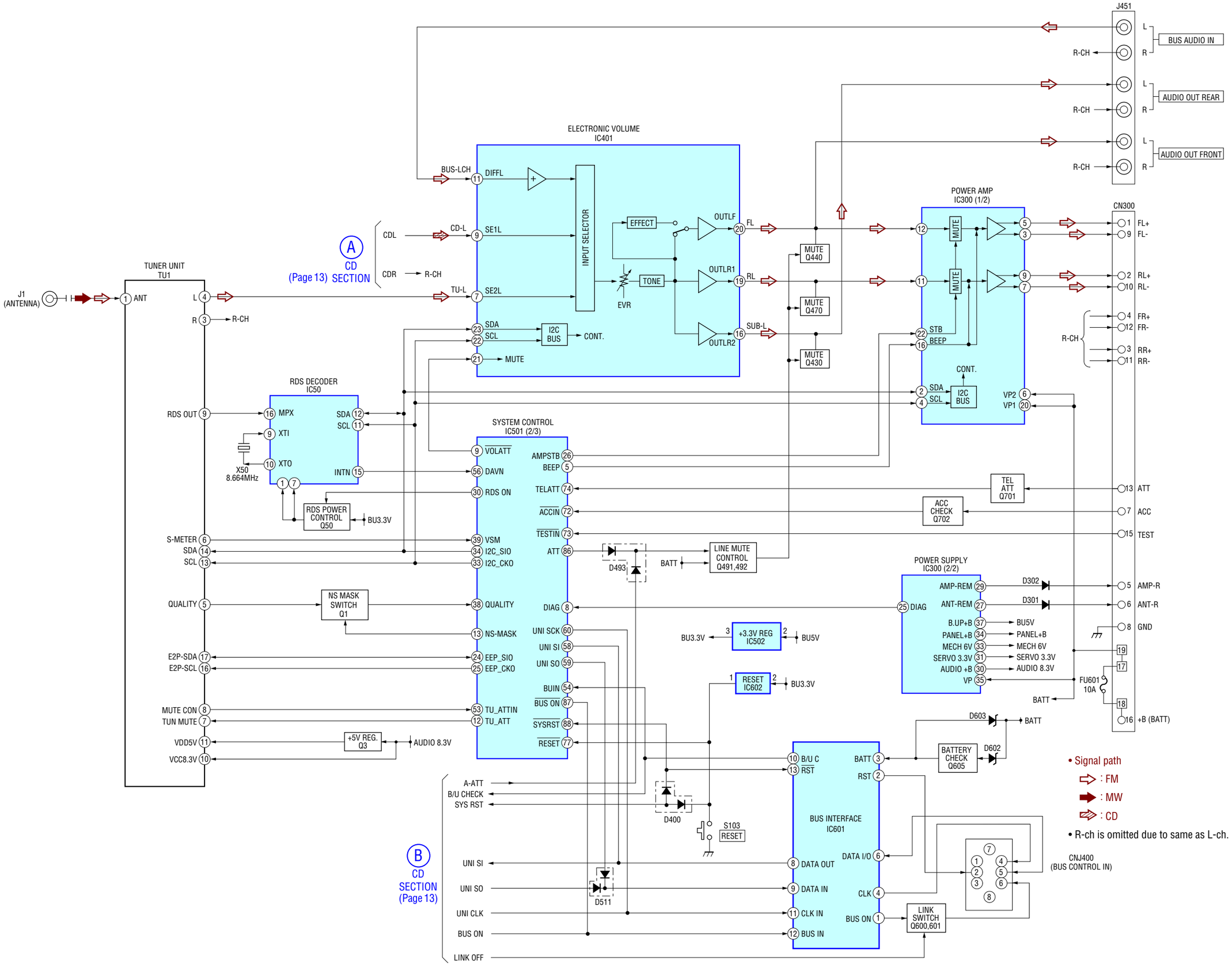


SECTION 3
DIAGRAMS

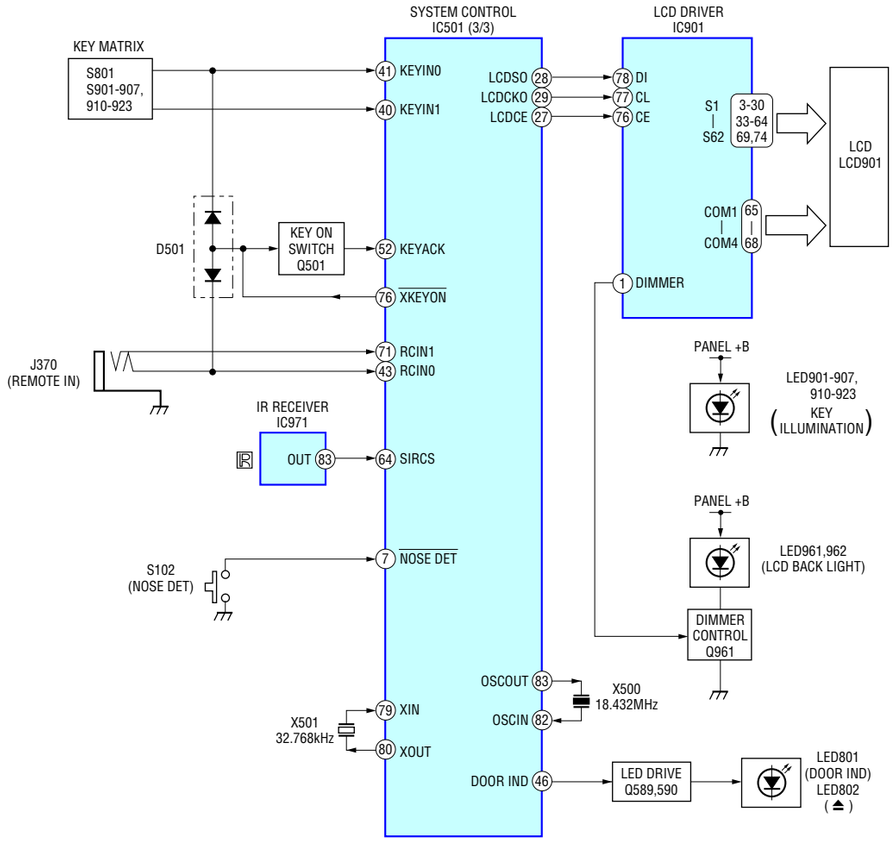
3-1. BLOCK DIAGRAM — CD SECTION —



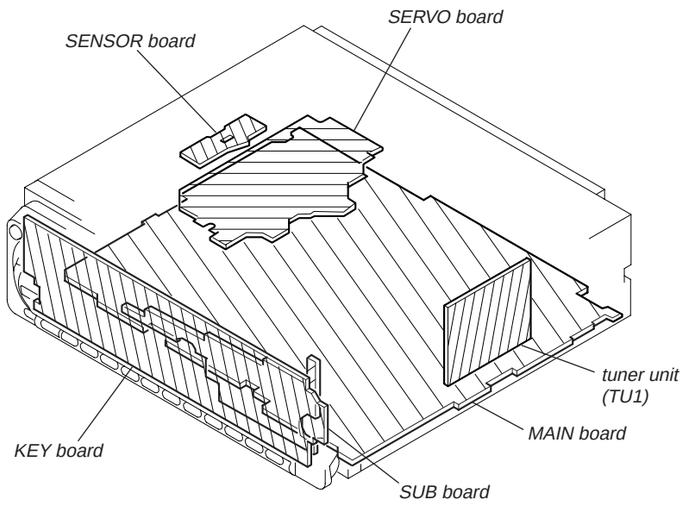
3-2. BLOCK DIAGRAM — MAIN SECTION —



3-3. BLOCK DIAGRAM — DISPLAY SECTION —



3-4. CIRCUIT BOARDS LOCATION



• WAVEFORMS

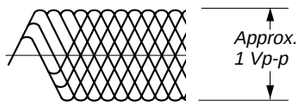
— SERVO BOARD —
(CD PLAY)

① IC2 ④ (FEI)

Approx. 100 mVp-p

50 mV/DIV, 5 msec/DIV

④ IC2 ㊼ (RFI)



0.5 V/DIV, 0.5 µsec/DIV

⑦ IC3 ㊶ (X1)

12 MHz

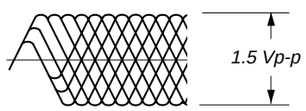
0.5 V/DIV, 0.2 µsec/DIV

② IC2 ⑥ (TEI)

Approx. 400 mVp-p

200 mV/DIV, 5 msec/DIV

⑤ IC2 ㊹ (FNI2), ㊺ (FNI1)



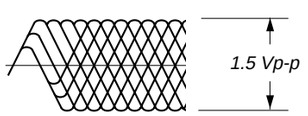
0.5 V/DIV, 0.5 µsec/DIV

③ IC2 ㉓ (XI)

16.9344 MHz

0.2 V/DIV, 0.2 µsec/DIV

⑥ IC2 ㊻ (FPI2), ㊼ (FPI1)



0.5 V/DIV, 0.5 µsec/DIV

• NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬ : B+ Line.
- ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD mechanism section (1/2), (2/2)
  no mark : CD PLAY
- Main (1/2), (2/2), Key and Display sections
  no mark : FM
  ( ) : MW/LW
  < > : CD PLAY
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD PLAY
  ⇨ : FM
  ➡ : MW/LW

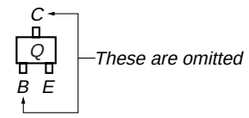
For printed wiring boards.

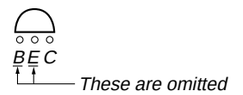
Note:

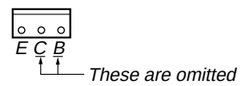
- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

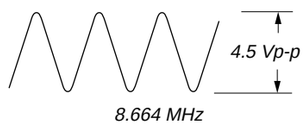






— MAIN BOARD —

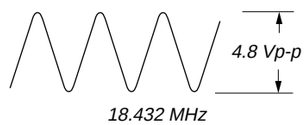
① IC50 ⑩ (XTO)



8.664 MHz

0.5 V/DIV, 0.2 µsec/DIV

③ IC501 ㉝ (OSCOUT)



18.432 MHz

0.5 V/DIV, 0.1 µsec/DIV

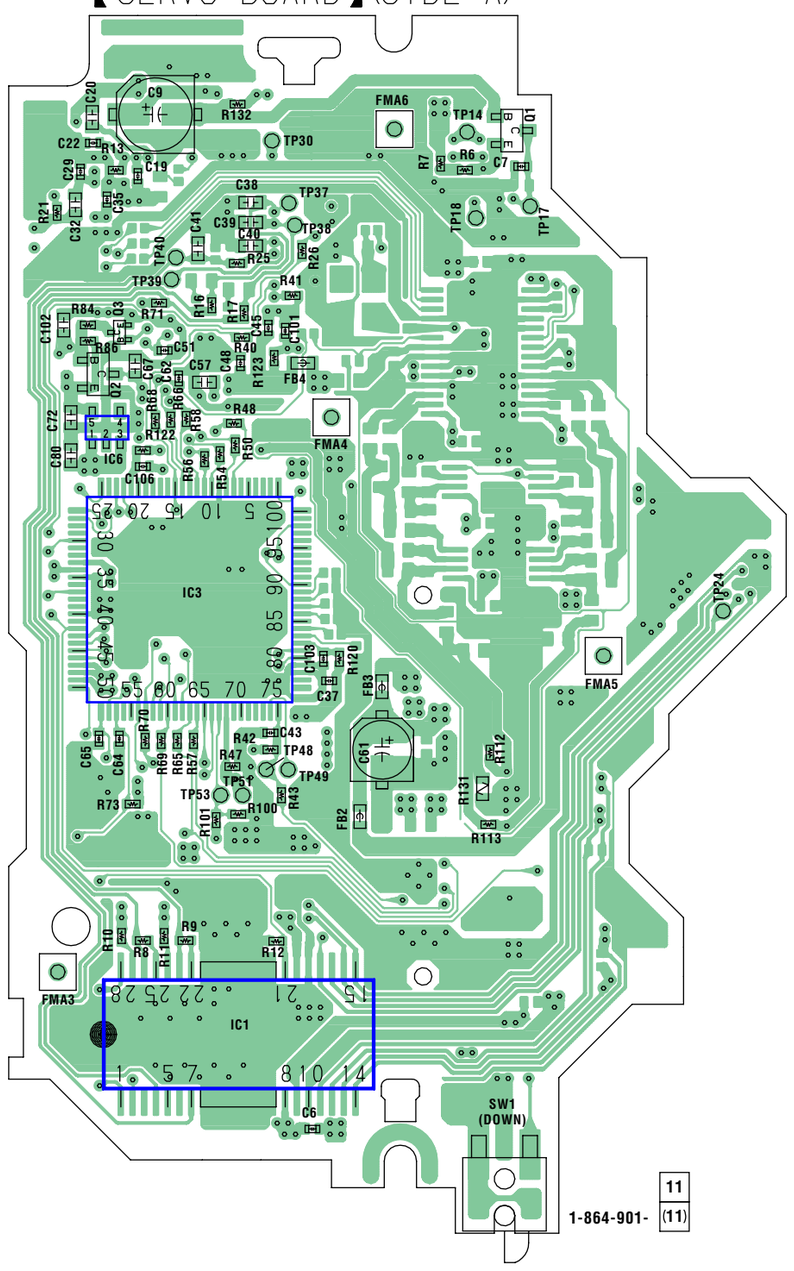
② IC501 ㉚ (XOUT)

32.768 kHz

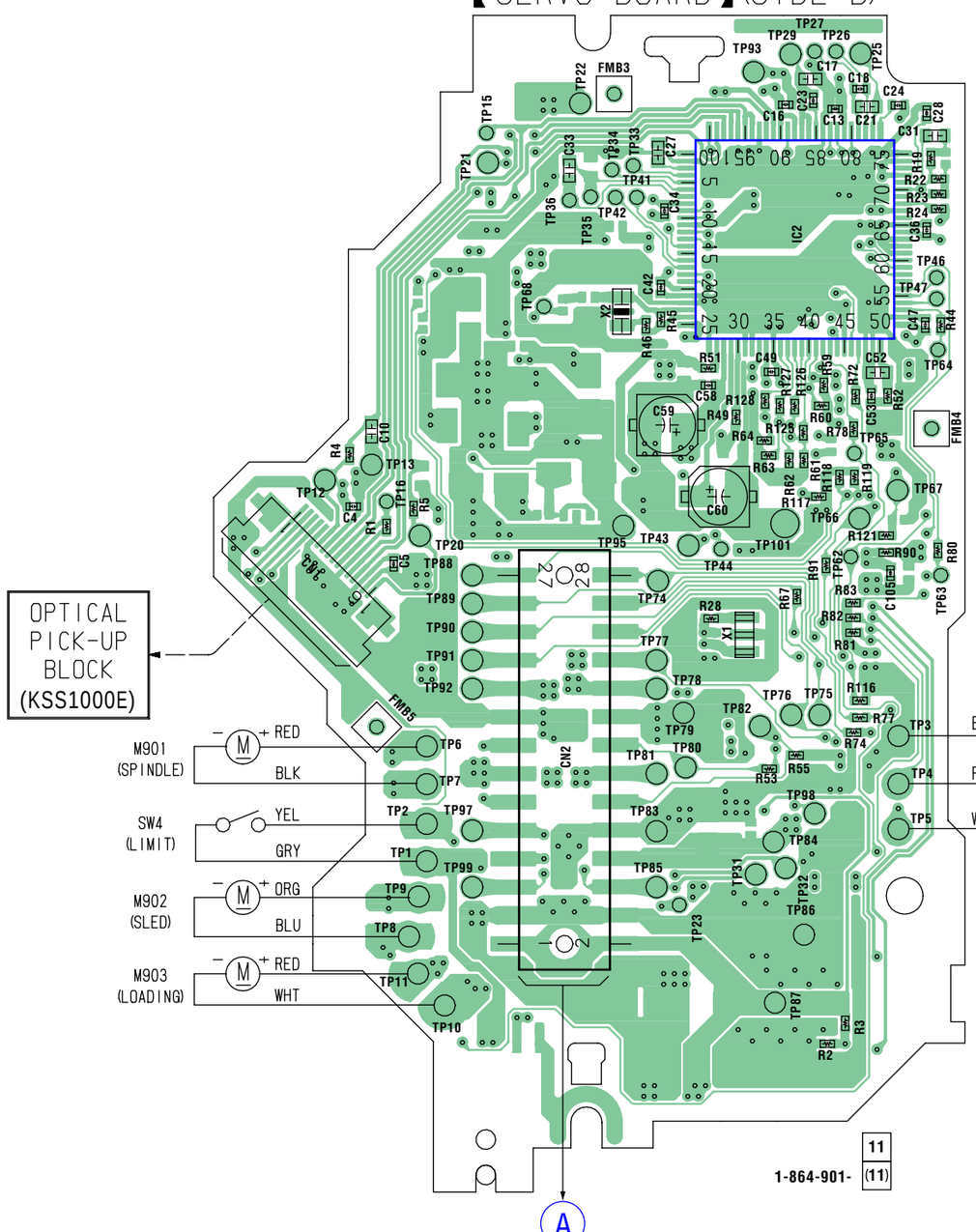
0.2 V/DIV, 20 µsec/DIV

3-5. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 16 for Circuit Boards Location. : Uses unleaded solder.

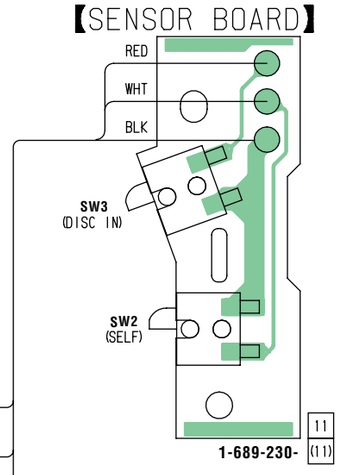
【SERVO BOARD】(SIDE A)



【SERVO BOARD】(SIDE B)



【SENSOR BOARD】



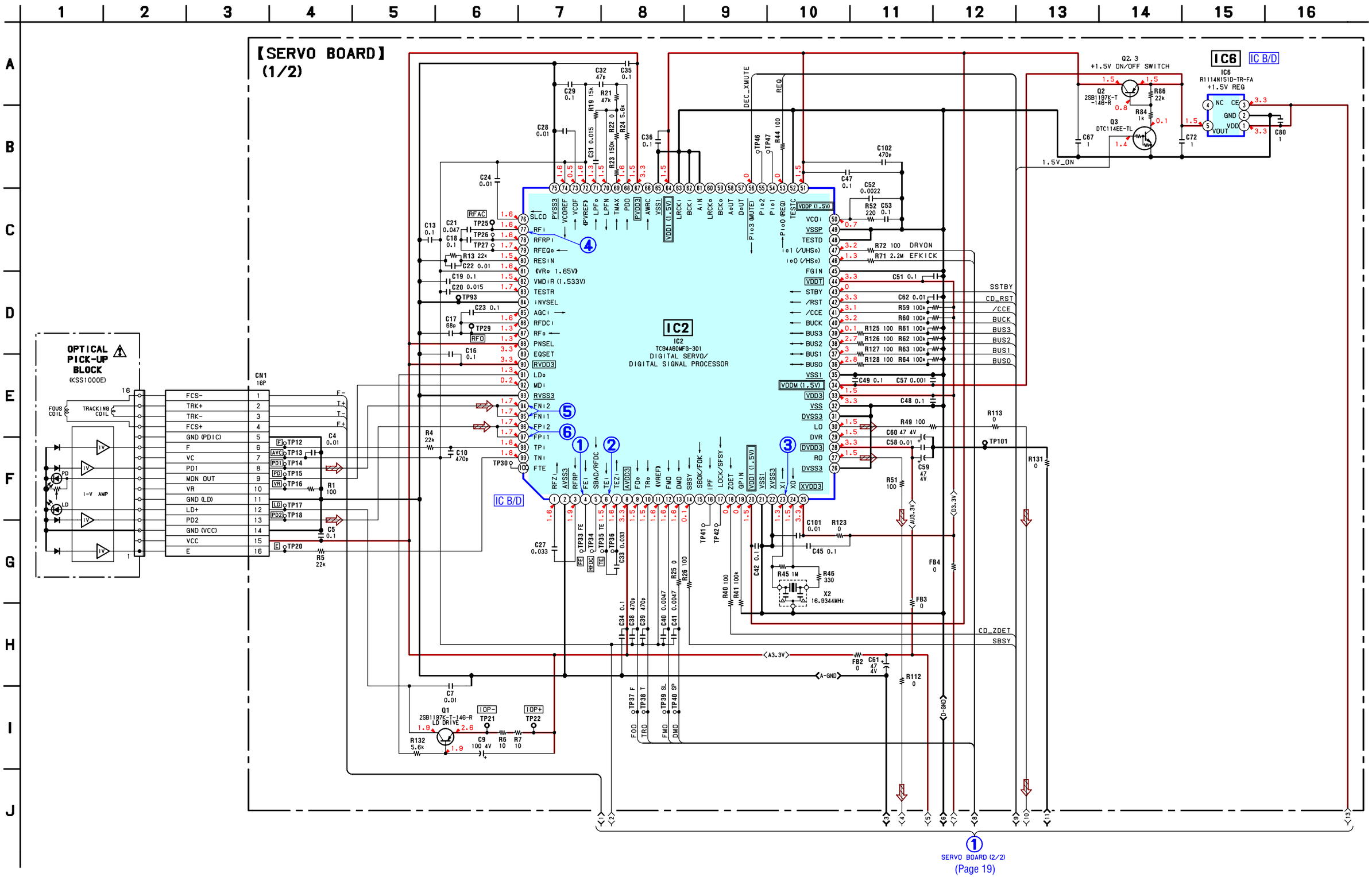
A
MAIN BOARD CN350
(Page 20)

• **Semiconductor Location**

Ref. No.	Location
IC1	G-2
IC2	B-11
IC3	E-2
IC6	D-1
Q1	B-4
Q2	C-1
Q3	C-1

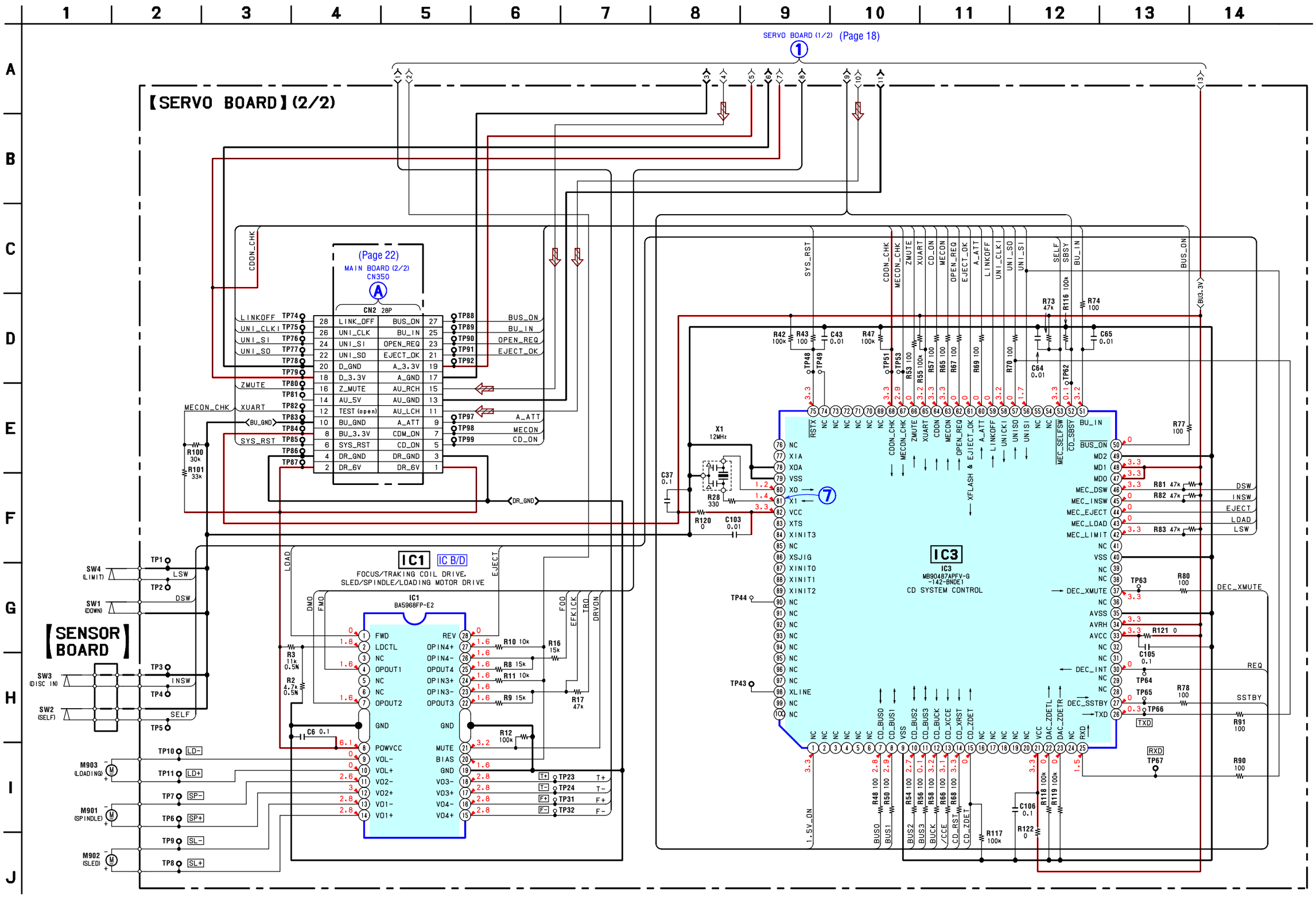
3-6. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) —

• Refer to page 16 for Waveforms.
• Refer to page 26 for IC Block Diagrams.

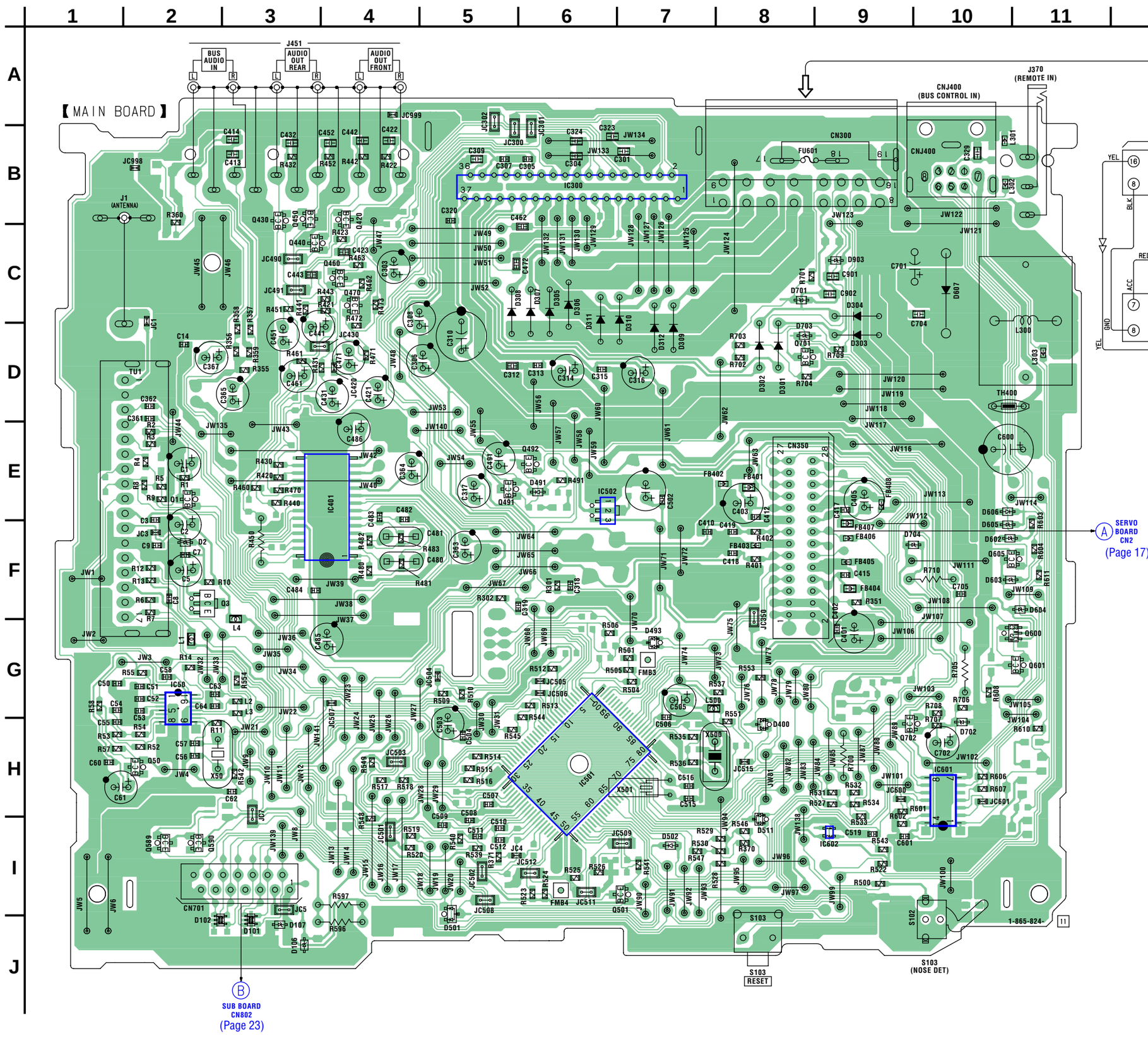


• Refer to page 16 for Waveform.
• Refer to page 26 for IC Block Diagram.
• Refer to page 28 for IC Pin Description.

3-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) —



3-8. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 16 for Circuit Boards Location. : Uses unleaded solder.

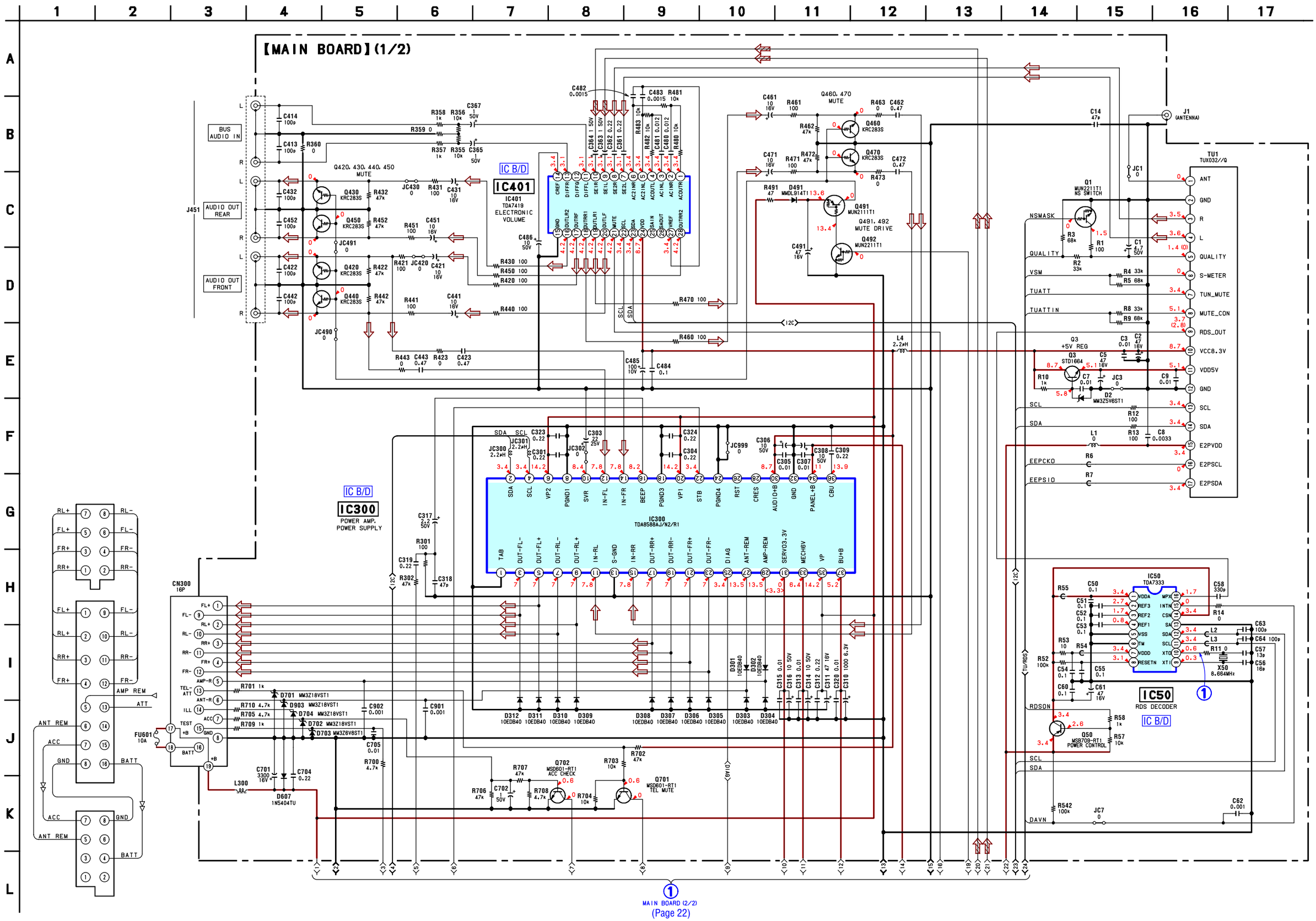


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D2	F-2	D703	D-8
D101	J-3	D704	F-10
D102	J-2	D903	C-9
D106	J-3		
D107	J-3	IC50	G-2
D301	D-8	IC300	B-6
D302	D-8	IC401	E-4
D303	D-9	IC501	H-6
D304	C-9	IC502	E-6
D305	C-6	IC601	H-10
D306	C-6	IC602	I-9
D307	C-6		
D308	C-5	Q1	E-2
D309	D-7	Q3	F-3
D310	C-7	Q50	H-2
D311	C-6	Q420	B-4
D312	D-7	Q430	B-3
D400	H-8	Q440	C-3
D491	E-6	Q450	B-3
D493	G-7	Q460	C-4
D501	J-5	Q470	C-4
D502	I-7	Q491	E-5
D511	I-8	Q492	E-6
D602	F-10	Q501	I-7
D603	F-10	Q589	I-2
D604	F-11	Q590	I-2
D605	F-10	Q600	G-11
D606	E-10	Q601	G-11
D607	C-10	Q605	F-10
D701	C-8	Q701	D-8
D702	H-10	Q702	H-9

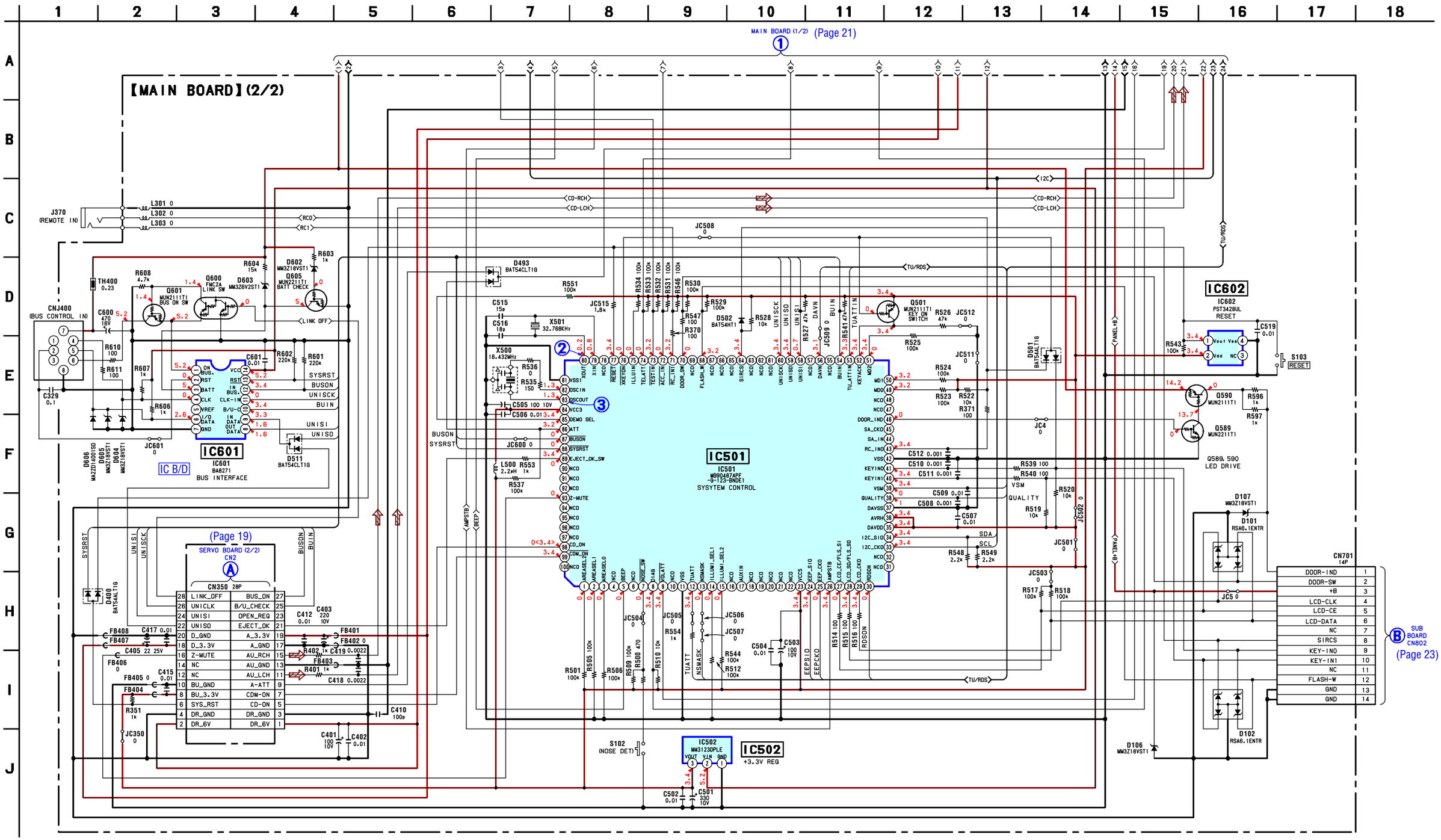
3-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

• Refer to page 16 for Waveform.
• Refer to page 26 for IC Block Diagram.



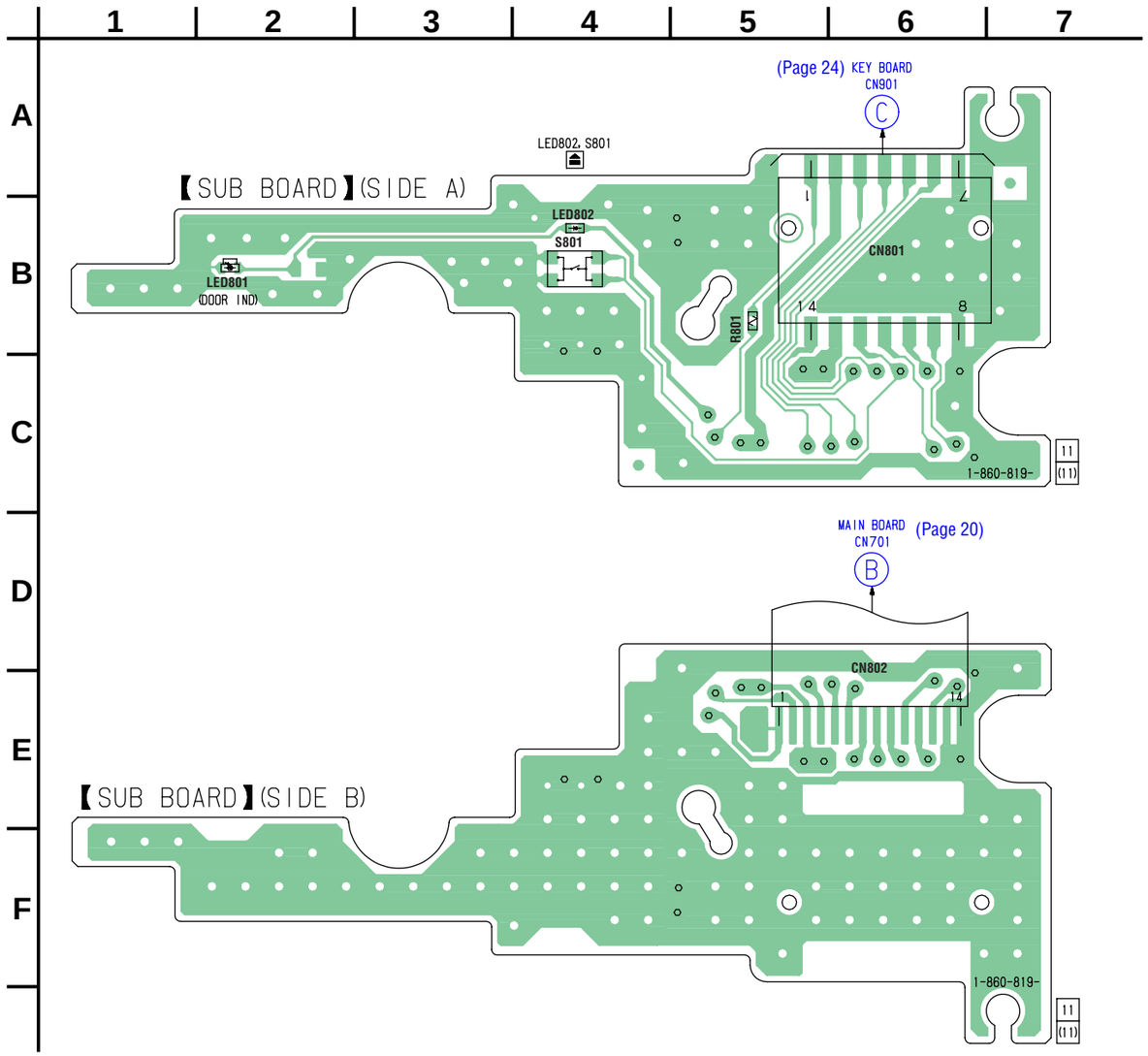
3-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) —

• Refer to page 16 for Waveforms.
• Refer to page 30 for IC Pin Description.

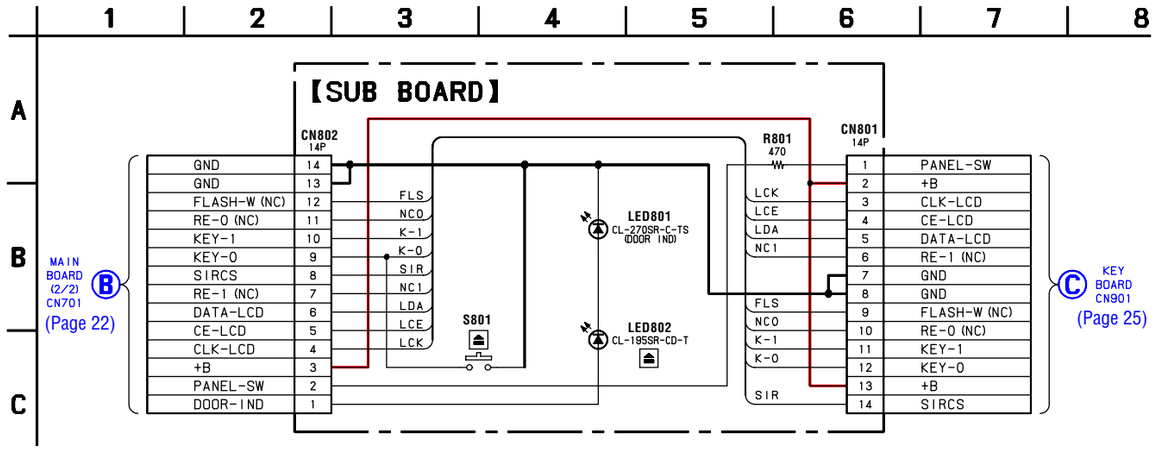


3-11. PRINTED WIRING BOARD — SUB SECTION — • Refer to page 16 for Circuit Boards Location.

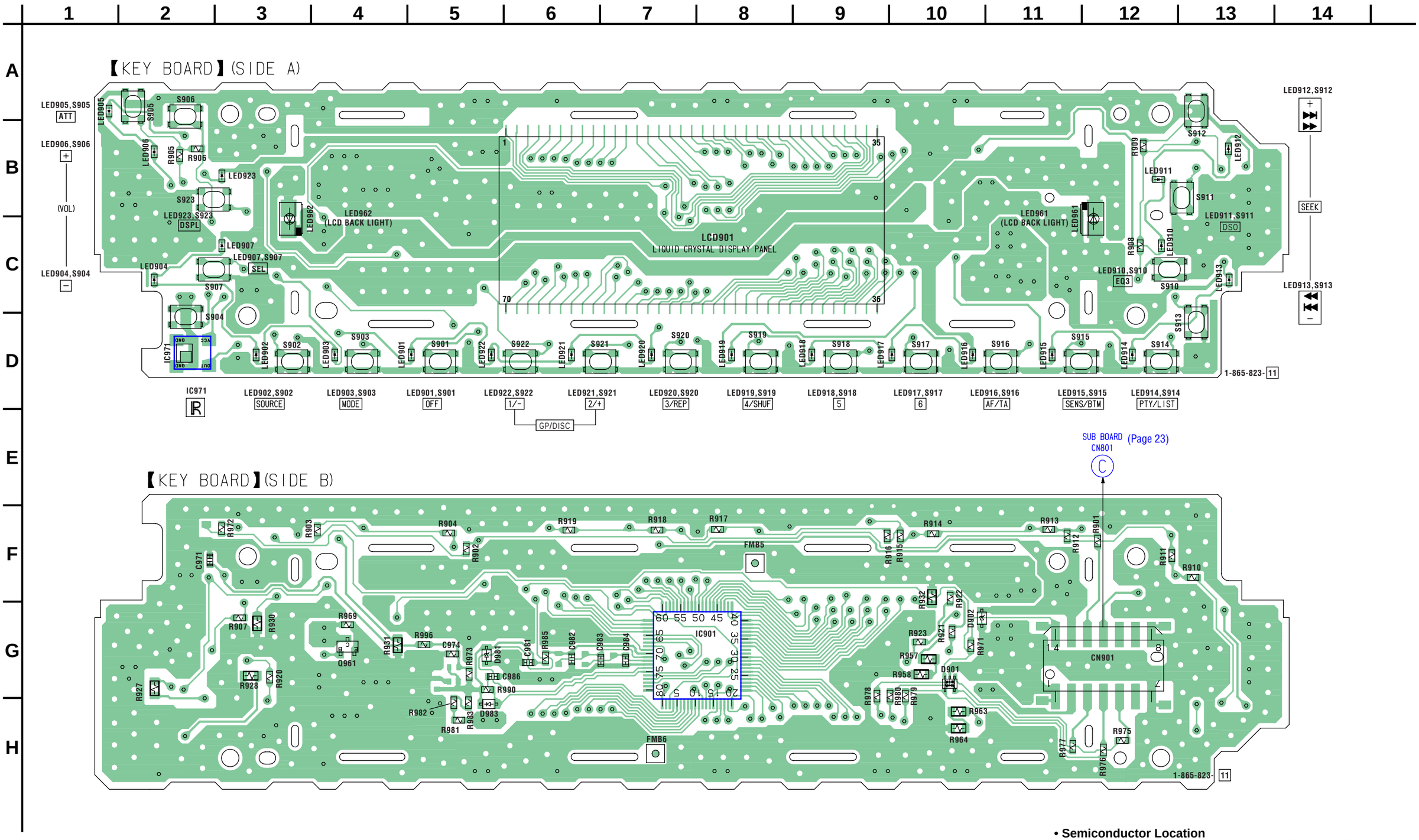
: Uses unleaded solder.



3-12. SCHEMATIC DIAGRAM — SUB SECTION —



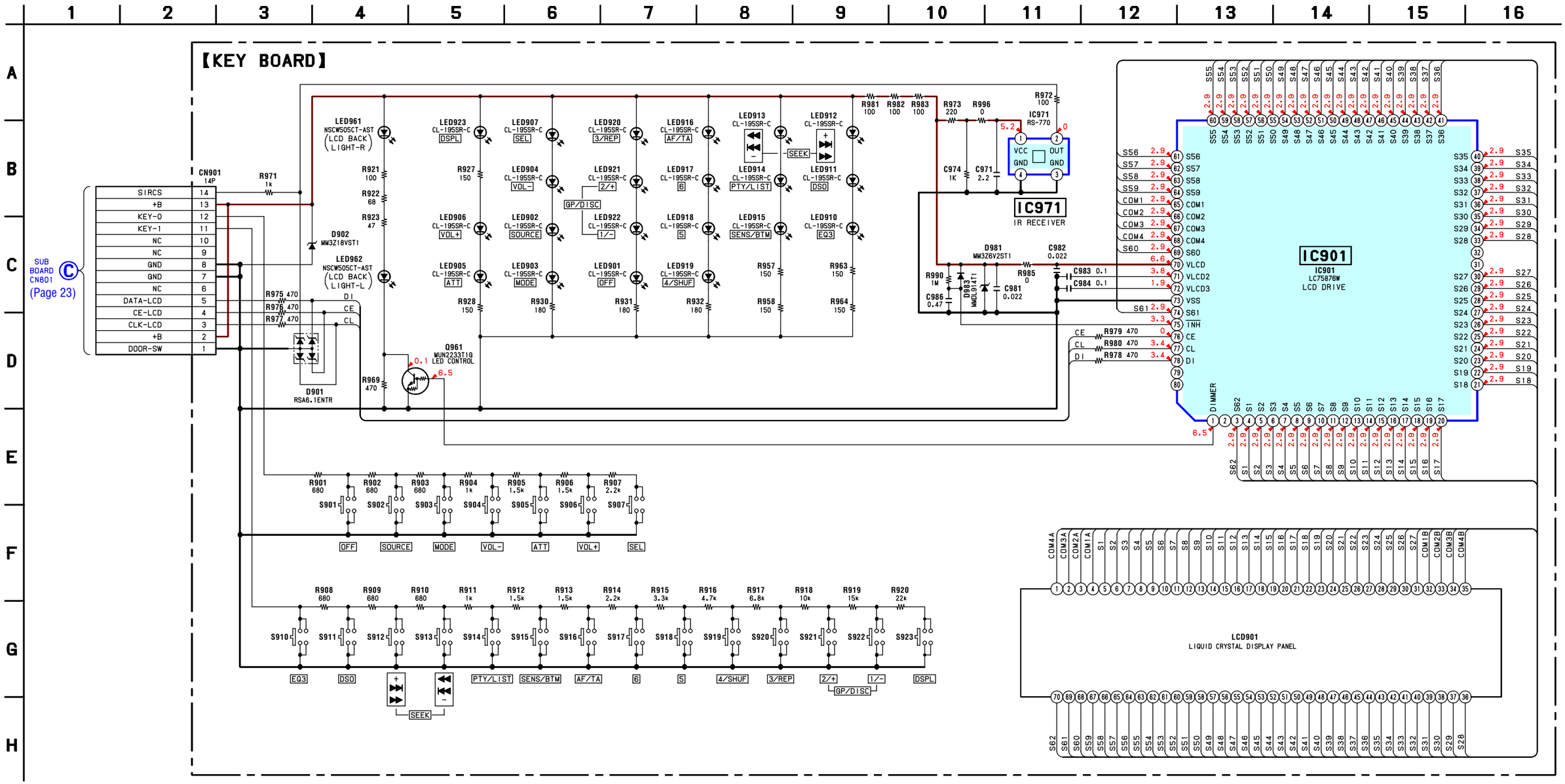
3-13. PRINTED WIRING BOARD — KEY SECTION — • Refer to page 16 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

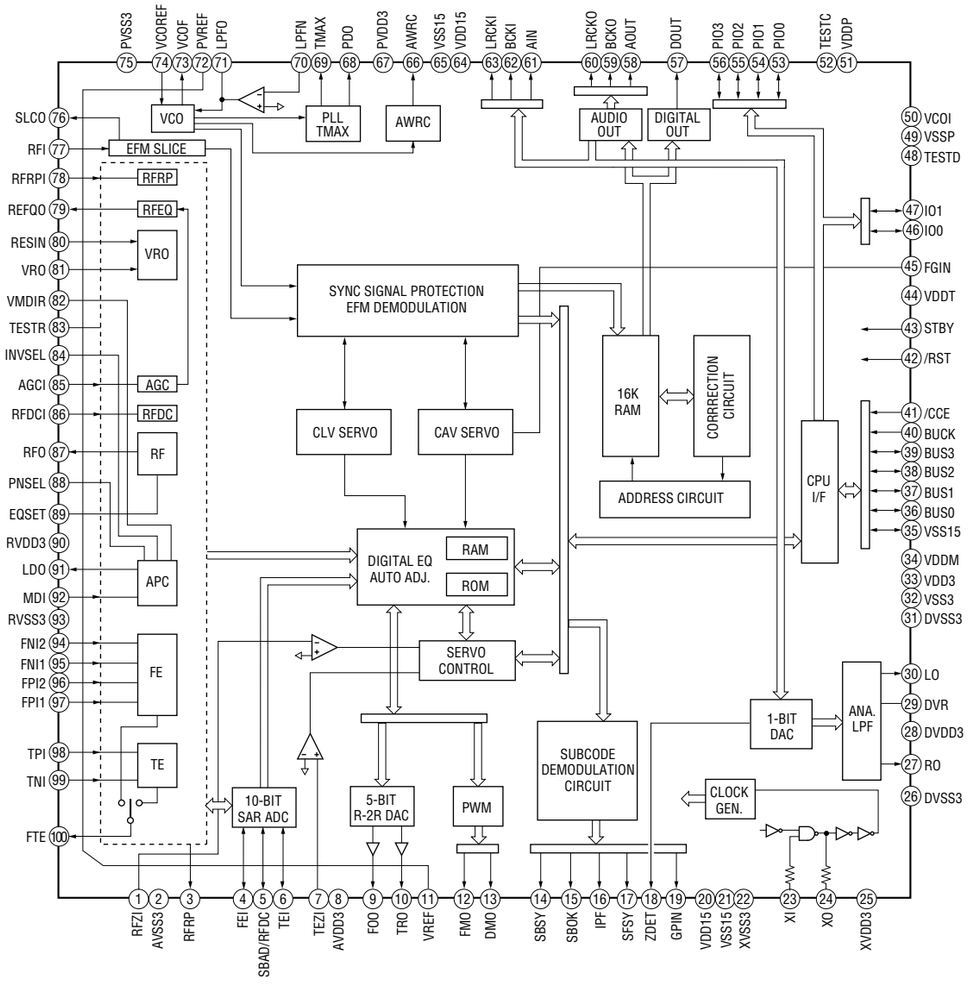
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D901	G-10	LED904	C-2	LED917	D-9
D902	G-10	LED905	A-1	LED918	D-9
D981	G-5	LED906	B-2	LED919	D-8
D983	H-5	LED907	C-3	LED920	D-7
		LED910	C-12	LED921	D-6
IC901	G-8	LED911	B-12	LED922	D-5
IC971	D-2	LED912	B-13	LED923	B-3
		LED913	C-13	LED961	C-11
LED901	D-4	LED914	D-12	LED962	C-3
LED902	D-3	LED915	D-11		
LED903	D-4	LED916	D-10	Q961	G-4

3-14. SCHEMATIC DIAGRAM — KEY SECTION —

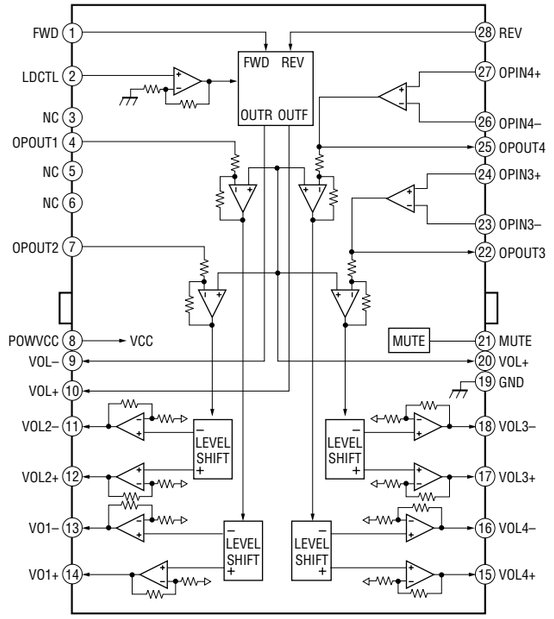


• IC BLOCK DIAGRAMS

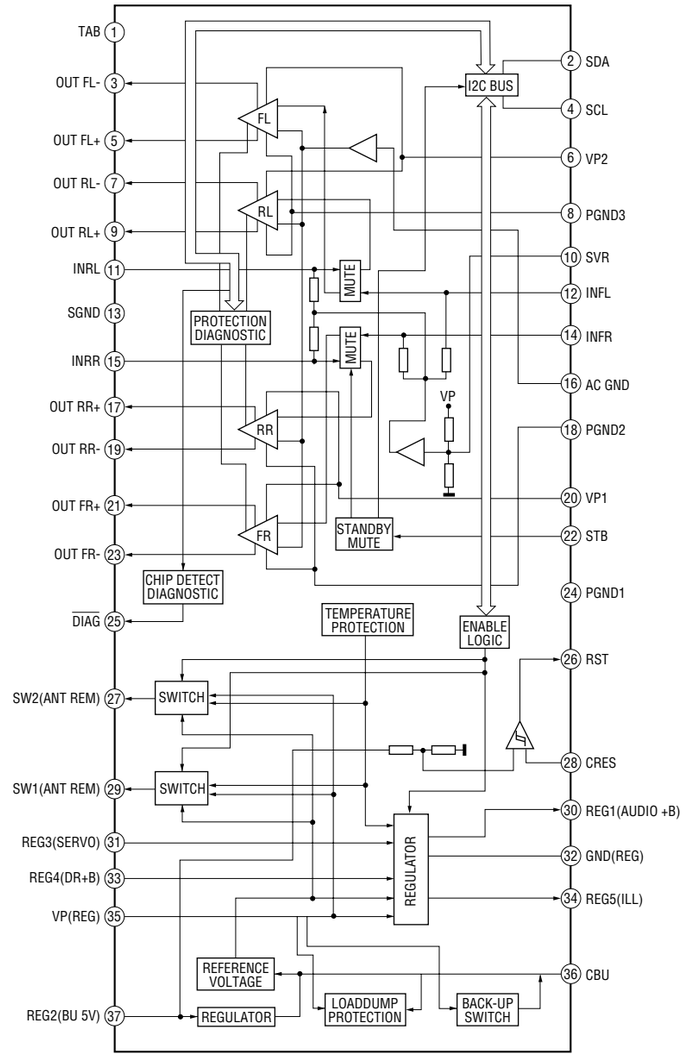
IC2 TC94A60MFG-301 (SERVO Board (1/2))


PVSS3 VCOREF VCOF PVREF LPFO LPFN TMAX PDO PVDD3 AWRC VSS15 VDD15 LRCKI BCKI AIN LRCKO BCKO AOUT DOUT PIO3 PIO2 PIO1 PIO0 TESTC VDDP
VCO
PLL TMAX
AWRC
AUDIO OUT
DIGITAL OUT
EFM SLICE
RFRP
RFEQ
VRO
AGC
RFDC
RF
APC
FE
TE
SYNC SIGNAL PROTECTION EFM DEMODULATION
CLV SERVO
CAV SERVO
16K RAM
CORRRECTION CIRCUIT
ADDRESS CIRCUIT
CPU I/F
DIGITAL EQ AUTO ADJ.
RAM
ROM
SERVO CONTROL
10-BIT SAR ADC
5-BIT R-2R DAC
PWM
SUBCODE DEMODULATION CIRCUIT
CLOCK GEN.
1-BIT DAC
ANA. LPF
SLCO RFI RFRPI REFQO RESIN VRO VMDIR TESTR INVSEL AGCI RFDCI RFO PNSEL EQSET RVDD3 LDO MDI RVSS3 FNI2 FNI1 FPI2 FPI1 TPI TNI FTE
VCOI VSSP TESTD IO1 IO0 FGIN VDDT STBY /RST /CCE BUCK BUS3 BUS2 BUS1 BUS0 VSS15 VDDM VDD3 VSS3 DVSS3 LO DVR DVDD3 RO DVSS3
RFZI AVSS3 RFRP FEI SBAD/RFDC TEI TEZI AVDD3 FOO TRO VREF FMO DMO SBSY SBOK IPF SFSY ZDET GPIN VDD15 VSS15 XVSS3 XI XO XVDD3

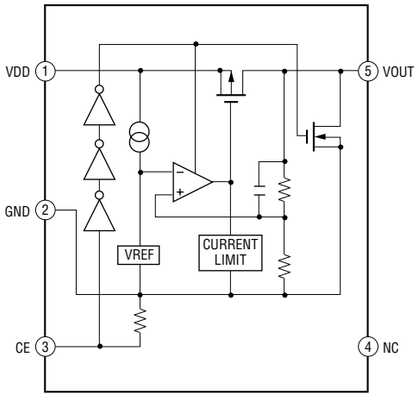
IC1 BA5968FP-E2 (SERVO Board (2/2))


FWD LDCTL NC OPOUT1 NC NC OPOUT2 POWVCC VOL– VOL+ VOL2– VOL2+ VO1– VO1+
REV OPIN4+ OPIN4– OPOUT4 OPIN3+ OPIN3– OPOUT3 MUTE VOL+ GND VOL3– VOL3+ VOL4– VOL4+
FWD REV
OUTR OUTF
VCC
MUTE
LEVEL SHIFT

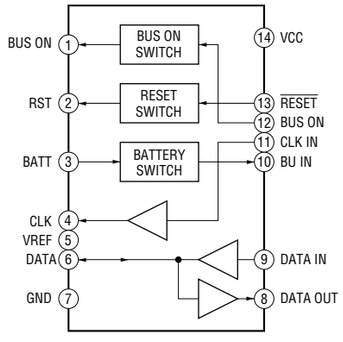
IC300 TDA8588AJ/N2/R1 (MAIN Board (1/2))


TAB OUT FL- OUT FL+ OUT RL- OUT RL+ INRL SGND INRR OUT RR+ OUT RR- OUT FR+ OUT FR- DIAG SW2(ANT REM) SW1(ANT REM) REG3(SERVO) REG4(DR+B) VP(REG) REG2(BU 5V)
SDA SCL VP2 PGND3 SVR INFL INFR AC GND PGND2 VP1 STB PGND1 RST CRES REG1(AUDIO +B) GND(REG) REG5(ILL) CBU
I2C BUS
FL
RL
RR
FR
MUTE
PROTECTION DIAGNOSTIC
STANDBY MUTE
CHIP DETECT DIAGNOSTIC
TEMPERATURE PROTECTION
ENABLE LOGIC
SWITCH
REGULATOR
REFERENCE VOLTAGE
LOADDUMP PROTECTION
BACK-UP SWITCH
VP

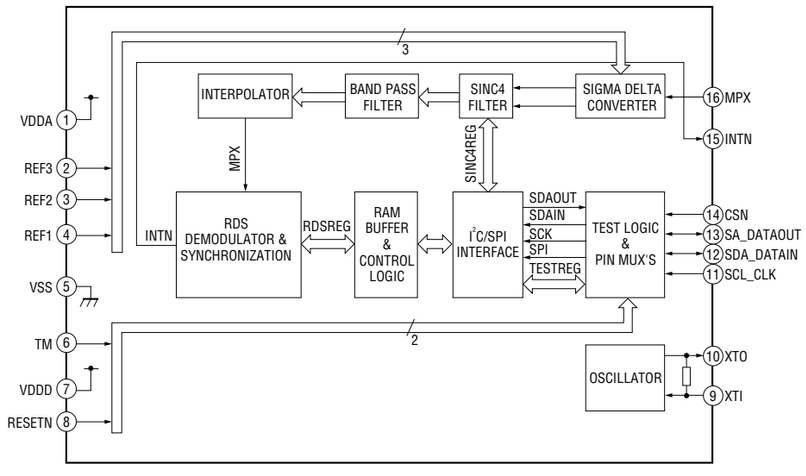
IC6 R1114N151D-TR-FA (SERVO Board (1/2))



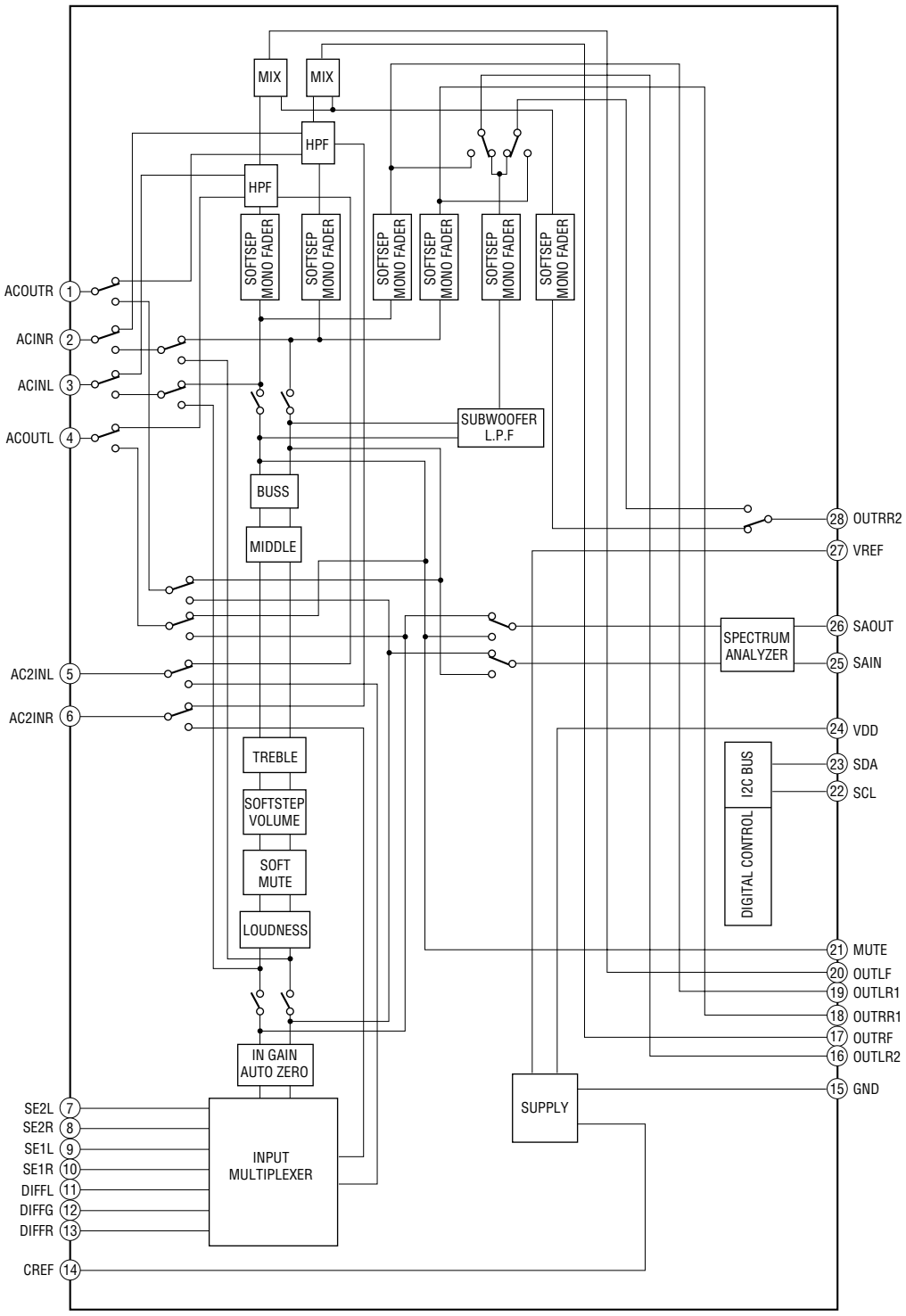
IC601 BA8271F-E2 (MAIN Board (2/2))



IC50 TDA7333013TR (MAIN Board (1/2))



IC401 TDA7419TR (MAIN Board (1/2))



• IC PIN DESCRIPTIONS

• IC3 MB90487APFV-G-142-BNDE1 (CD SYSTEM CONTROL) (SERVO BOARD (2/2))

Pin No.	Pin Name	I/O	Pin Description
1	NC	O	Servo 1.5 V power supply control signal output
2 to 6	NC	—	Not used. (Open)
7	CD BUS0	I/O	Bus data signal input/output 0
8	CD BUS1	I/O	Bus data signal input/output 1
9	VSS	—	Ground pin
10	CD BUS2	I/O	Bus data signal input/output 2
11	CD BUS3	I/O	Bus data signal input/output 3
12	CD BUCK	O	Bus clock signal output
13	CD XCCE	O	Chip enable signal output
14	CD XRST	O	Reset signal output
15	CD ZDET	I	Zero detection signal input
16 to 20	NC	—	Not used. (Open)
21	VCC	—	Power supply pin (+3.3 V)
22	DAC ZDETL	I	Zero data detection signal input (L-ch)
23	DAC ZDETR	I	Zero data detection signal input (R-ch)
24	NC	—	Not used. (Open)
25	RXD	I	UART RXD data signal input (MCBUS/Flash data input)
26	TXD	O	UART TXD data signal output (MCBUS/Flash data output)
27	DEC SSTBY	O	SRAM STANDBY mode control signal output
28, 29	NC	—	Not used. (Open)
30	DEC INT	I	Request signal input
31, 32	NC	—	Not used. (Open)
33	AVCC	—	Power supply pin (+3.3 V) for A/D converter
34	AVRH	—	External reference voltage for A/D converter
35	AVSS	—	Ground pin
36	NC	—	Not used. (Open)
37	DEC XMUTE	O	Mute signal output L: mute
38, 39	NC	—	Not used. (Open)
40	VSS	—	Ground pin
41	NC	—	Not used. (Open)
42	MEC LIMIT	I	Sled limit in detection switch signal input
43	MEC LOAD	O	Loading motor signal output (Load direction)
44	MEC EJECT	O	Loading motor signal output (Eject direction)
45	MEC INSW	I	Pack-in detection signal input
46	MEC DSW	I	Chucking end detection switch signal input
47, 48	MD0, MD1	I	CPU operation mode designation signal input (Connect to Vcc.)
49	MD2	I	CPU operation mode designation signal input (Connect to Vss.)
50	$\overline{\text{BUS ON}}$	I	Bus on signal input L: bus on
51	BU IN	I	Backup on/off signal input H: backup on, L: backup off
52	$\overline{\text{CD SBSY}}$	I	SUBQ sync signal input L: interruption
53	$\overline{\text{MEC SELFSW}}$	I	Disc insert detection switch signal input L: disc in interruption
54, 55	NC	—	Not used. (Open)
56	UNISI	I	Serial data signal input
57	UNISO	O	Serial data signal output
58	UNICKI	I	Serial clock signal input
59	LINEOFF	O	Line off signal output
60	A ATT	O	Audio attenuation signal output H: ATT on
61	EJECT OK	I	Front panel open signal input H: eject
62	OPEN REQ	O	Front panel open/close request signal output H: open request
63	MECON	O	Mechanism deck power supply control signal output
64	CDON	O	Servo power supply control signal output

Pin No.	Pin Name	I/O	Pin Description
65	XUART	I	Sony-Bus/MC-Bus change signal input H: Sony-Bus, L: MC-Bus
66	ZMUTE	O	Zero detection mute signal output
67	MECON CHK	I	MECON rising detection signal input
68	CDON CHK	I	CDON rising detection signal input
69 to 74	NC	—	Not used. (Open)
75	$\overline{\text{RSTX}}$	I	System reset signal input
76	NC	—	Not used. (Open)
77	X1A	—	Sub-clock connect pin Not used in this set. (Open)
78	X0A	—	Sub-clock connect pin Not used in this set. (Connect to Vss.)
79	VSS	—	Ground pin
80	X0	I	Main-clock connect pin (12 MHz)
81	X1	O	Main-clock connect pin (12 MHz)
82	VCC	—	Power supply pin (+3.3 V)
83	XTS	I	Not used in this set. (Open)
84	XINIT3	I	Not used in this set. (Open)
85	NC	—	Not used. (Open)
86	XSJIG	I	Not used in this set. (Open)
87 to 89	XINIT0 to 2	I	Not used in this set. (Open)
90 to 97	NC	—	Not used. (Open)
98	XLINE	I	Not used in this set. (Open)
99, 100	NC	—	Not used. (Open)

• IC501 MB90487APF-G-123-BNDE1 (SYSTEM CONTROL) (MAIN BOARD (2/2))

Pin No.	Pin Name	I/O	Pin Description
1	AREA SEL2	I	Destination setting pin
2	AREA SEL1	I	Destination setting pin
3	AREA SEL0	I	Destination setting pin
4	NCO	I	Not used
5	BEEP	O	Beep signal output
6	NCO	I	Not used
7	NOSE SW	I	Front panel open/close detect signal input
8	DIAG	I	Power AMP status signal input
9	VOL ATT	O	Electronic volume attenuate control signal output
10	NCO	O	Not used
11	VSS	—	Ground
12	TU ATT	O	Tuner mute control signal output
13	NS MASK	O	Noise mask signal output
14	ILLUMI SEL1	I	Illumination voltage setting pin
15	ILLUMI SEL2	I	Illumination voltage setting pin
16	NCO	O	Not used
17	AUX IN	O	Not used
18	NCO	O	Not used
19	NCO	O	Not used
20	NCO	O	Not used
21	NCO	O	Not used
22	NCO	O	Not used
23	VCC5	—	Power supply pin (+3.3V)
24	EEP SIO	I/O	EEPROM bus serial data input/output
25	EEP CKO	O	EEPROM bus serial clock output
26	AMP STB	O	Power AMP satandby signal output
27	LCD CE	O	LCD driver chip enable output
28	LCD SO	O	LCD driver serial data output
29	LCD SCK	O	LCD driver serial clock output
30	RDS ON	O	RDS ON signal output
31	NCO	O	Not used
32	NCO	O	Not used
33	I2C SCK	O	I2C bus serial clock output
34	I2C SIO	I/O	I2C bus serial data input/output
35	DAVDD	—	A/D converter power supply pin (+3.3V)
36	AVRH	—	A/D converter reference power supply pin (+3.3V)
37	DAVSS	—	Ground
38	QUALITY	I	Noise detect signal input
39	VSM	I	S-meter voltage detect signal input
40	KEY IN1	I	Key signal input
41	KEY IN0	I	Key signal input
42	VSS	—	Ground
43	RC IN0	I	Rotary commander key signal input
44	SA_IN	I	Spectrum analyzer data signal input (Not used in this set)
45	SA_CKO	O	Spectrum analyzer clock signal output (Not used in this set)
46	NCO	O	Not used
47	NCO	O	Not used
48	NCO	O	Not used
49	MD0	I	Operation mode setting pin
50	MD1	I	Operation mode setting pin
51	MD2	I	Operation mode setting pin
52	KEY ACK	I	Key acknowledgment detect signal input

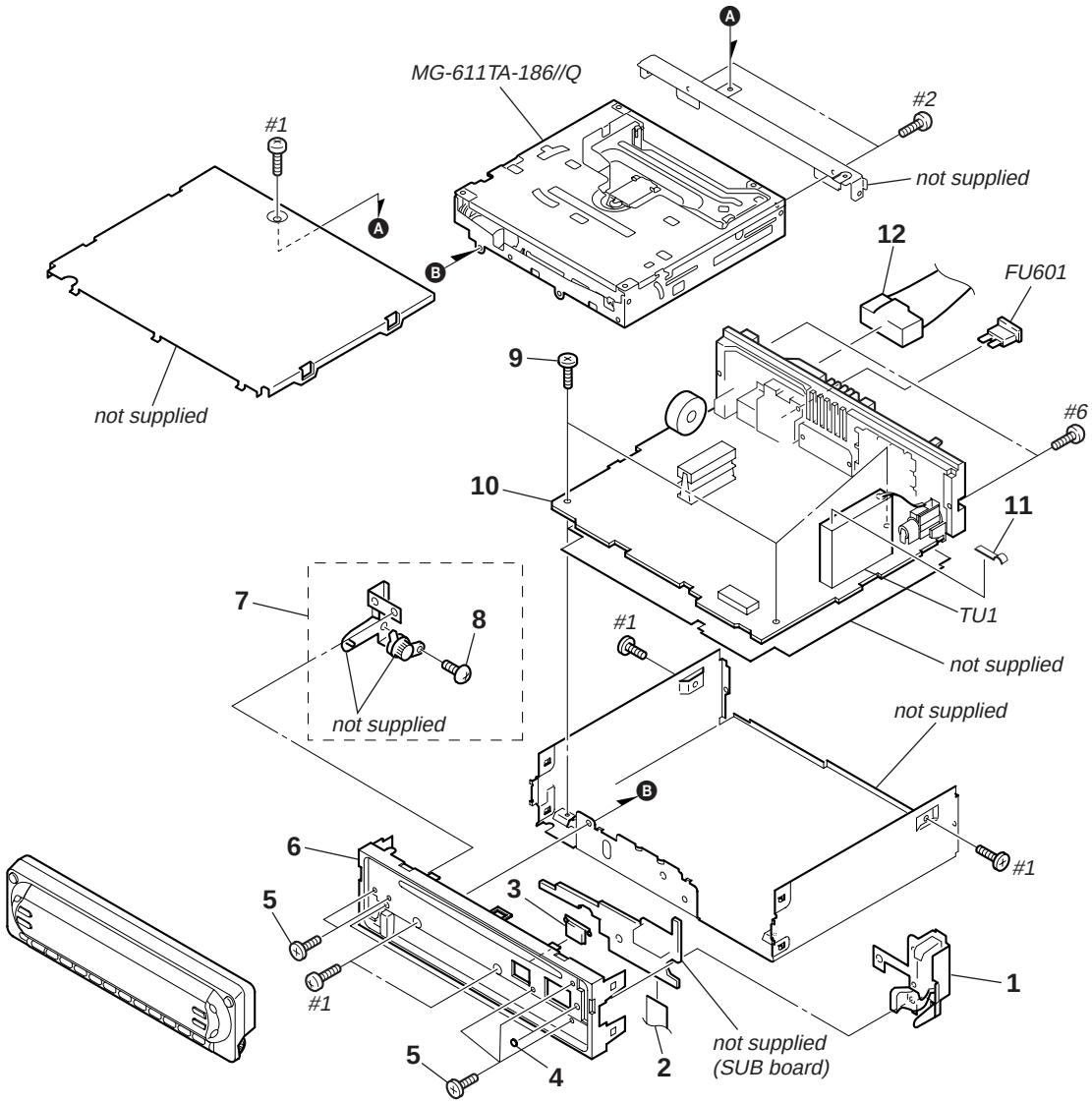
Pin No.	Pin Name	I/O	Pin Description
53	TU ATT IN	I	Tuner mute zero cross detect signal input
54	BU IN	I	Back-up power supply detect signal input
55	NCO	O	Not used
56	DAVN	I	RDS data block synchronized detect signal input
57	NCO	O	Not used
58	UNI SI	I	SONY bus data input
59	UNI SO	O	SONY bus data output
60	UNI SCK	O	SONY bus clock output
61	NCO	O	Not used
62	NCO	O	Not used
63	NCO	O	Not used
64	SIRCS	I	Remote control signal input
65	NCO	O	Not used
66	NCO	O	Not used
67	NCO	O	Not used
68	FLASH W	I	Memory mode select signal input
69	NCO	O	Not used
70	SYNCHRO SW	I	Synchro CD door open/close detect signal input
71	RC IN1	I	Rotary commander shift key signal input
72	ACC IN	I	Accessory power supply detect signal input
73	TEST IN	I	Test mode detect signal input
74	TEL ATT	I	Telephone attenuate detect signal input
75	ILLU IN	I	Illumination detect signal input
76	XKEY ON	O	A/D converter power supply control signal output
77	RESET	I	CPU reset input
78	NCO	O	Not used
79	XIN	—	Sub-clock input (32.768kHz)
80	XOUT	—	Sub-clock output (32.768kHz)
81	VSS1	—	Ground
82	OSC IN	—	Main-clock input (3.68MHz)
83	OSC OUT	—	Main-clock output (3.68MHz)
84	VCC3	—	Power supply pin (+3.3V)
85	DEMO SEL	I	Demo select signal input
86	ATT	O	Audio mute control signal output
87	BUS ON	O	Bus ON signal output
88	SYS RST	O	System reset output
89	EJECT OK SW	O	Eject OK signal output
90	NCO	O	Not used
91	NCO	O	Not used
92	NCO	O	Not used
93	Z-MUTE	I	Z-Mute signal input
94	NCO	O	Not used
95	NCO	O	Not used
96	NCO	O	Not used
97	NCO	O	Not used
98	CD ON	I	CD servo power control request signal input
99	CDM ON	I	CD deck power control request signal input
100	NCO	O	Not used

SECTION 4
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories are given in the last of this parts list.

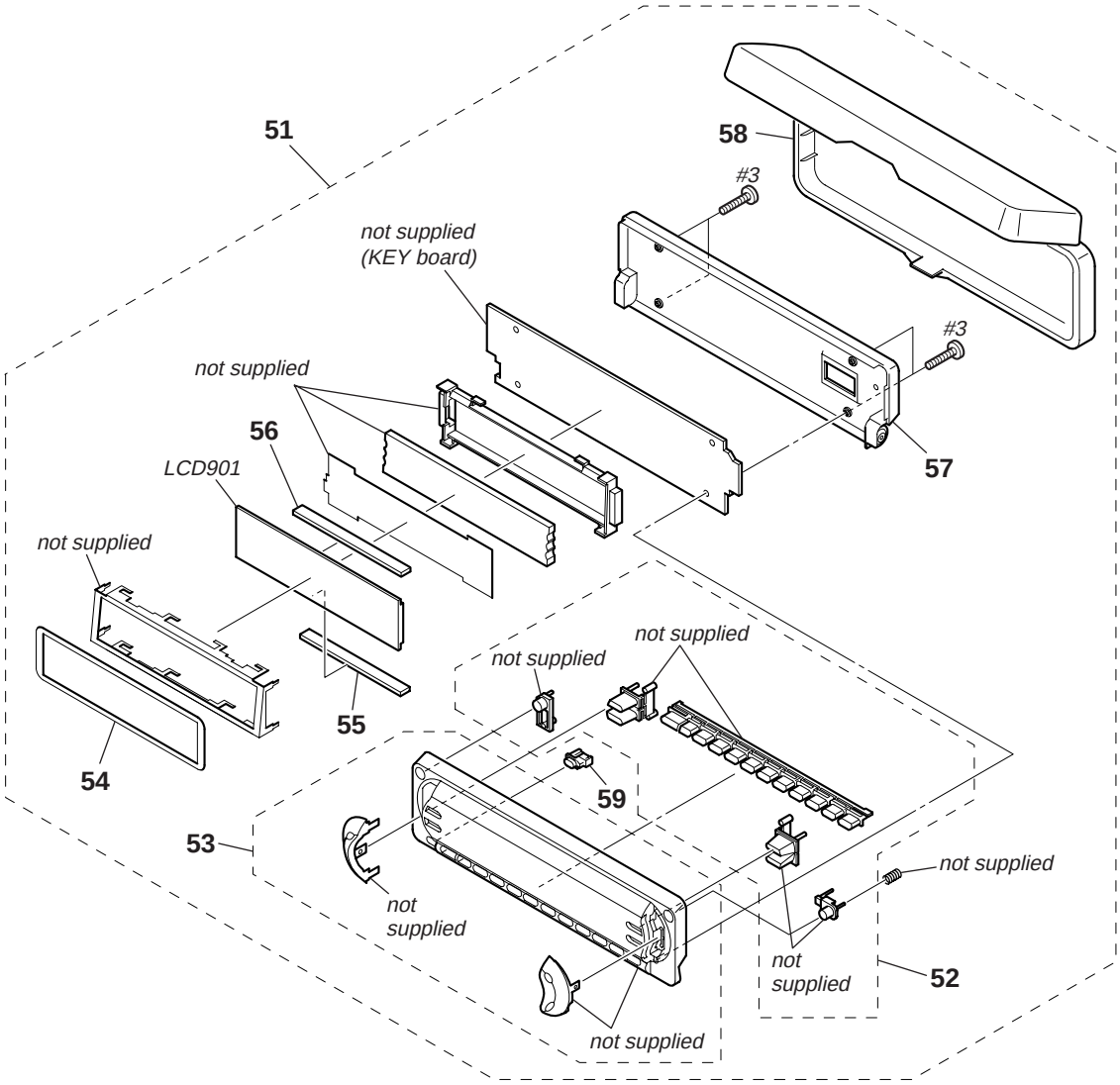
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	X-3384-259-1	LOCK ASSY	
2	1-792-195-31	CABLE, FLEXIBLE FLAT (14 CORE)	
3	3-246-441-01	BUTTON (EJECT)	
4	3-260-247-01	CUSHION (SUB PANEL)	
5	3-042-244-01	SCREW (T)	
6	X-3384-364-3	SUB PANEL ASSY	
7	X-3384-203-1	GEAR ASSY	
8	3-713-786-51	SCREW +P 2X3	
9	2-050-124-01	SCREW +BTT 2.6X5	
10	A-1085-118-A	MAIN BOARD, COMPLETE	
11	2-021-848-01	SHEET (TU), GROUND	
12	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU1	A-3220-961-A	TUNER UNIT (TUX-032)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#6	7-685-793-09	SCREW +PTT 2.6X8 (S)	

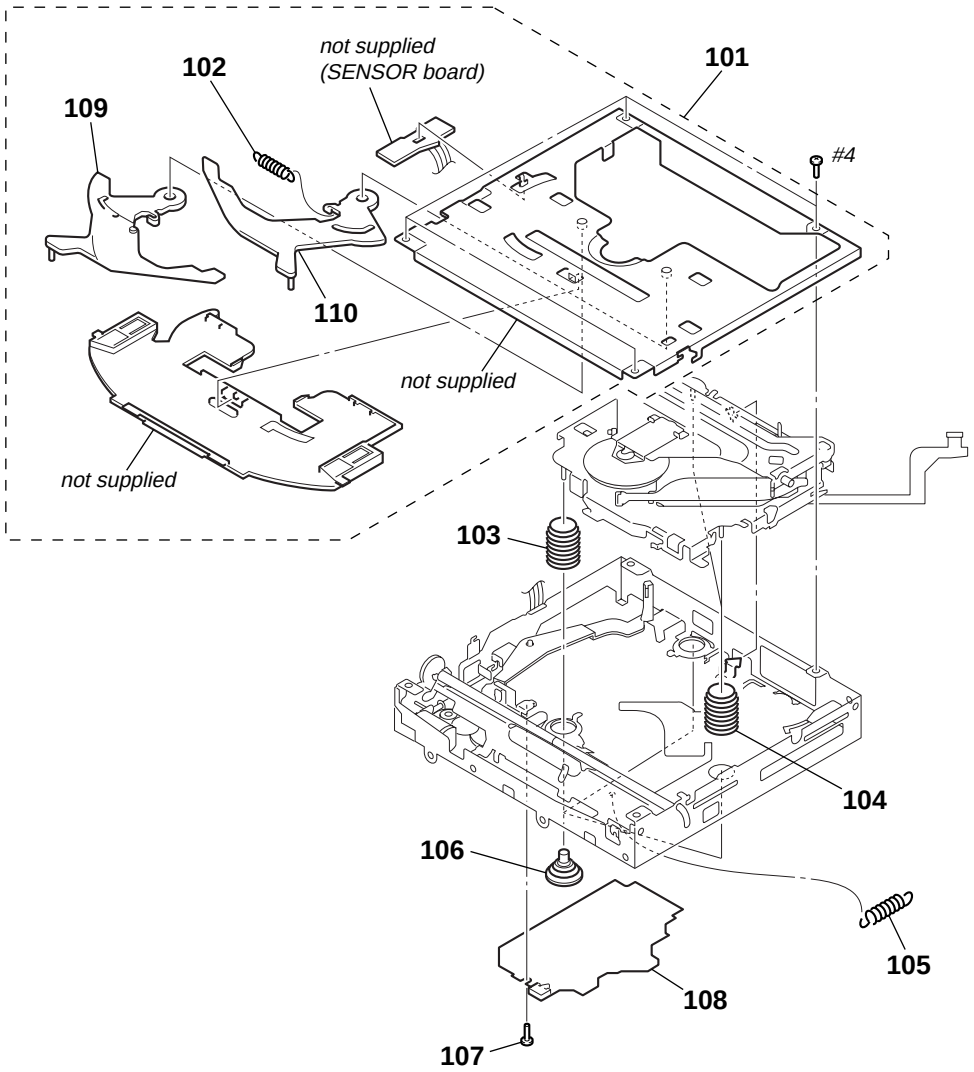
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-1085-120-A	PANEL COMPLETE ASSY, FRONT	
52	X-2024-732-1	BUTTON ASSY (S)	
53	X-2024-733-1	PANEL (SV) ASSY, FRONT	
54	3-260-250-01	CUSHION, DUST PROTECTION	
55	1-780-104-11	CONDUCTIVE BOARD, CONNECTION	
56	1-780-095-11	CONDUCTIVE BOARD, CONNECTION	

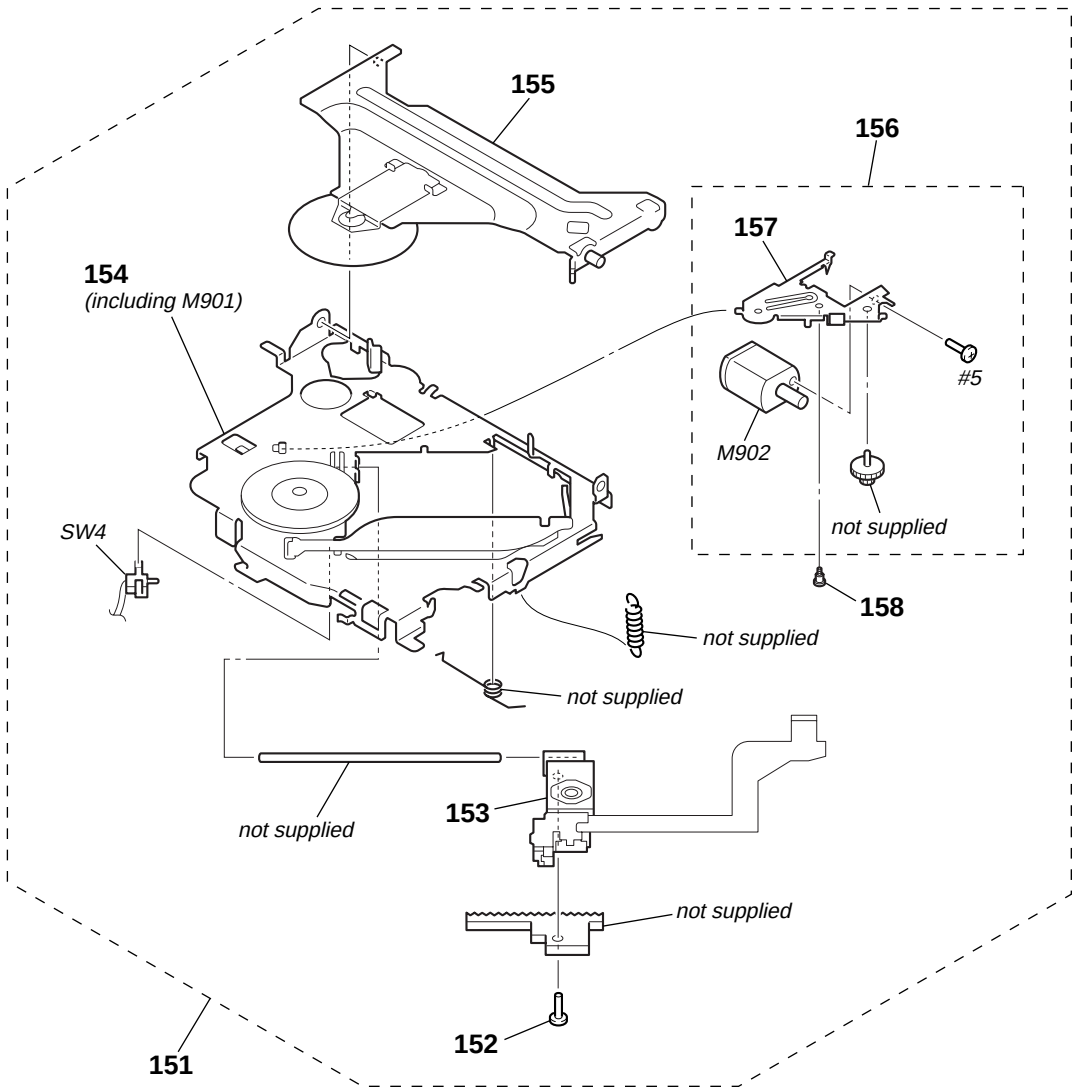
Ref. No.	Part No.	Description	Remark
57	X-3384-367-1	PANEL ASSY, FRONT BACK	
58	X-3385-071-1	CASE ASSY (for FRONT PANEL)	
59	3-260-227-01	FILTER (IR)	
LCD901	1-805-760-11	DISPLAY PANEL, LIQUID CRYSTAL	
#3	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

4-3. CD MECHANISM SECTION (1)
(MG-611TA-186//Q)



Ref. No.	Part No.	Description	Remark
101	A-3372-444-A	CHASSIS (T) SUB ASSY	
102	3-253-729-11	SPRING (LTR), TENSION COIL	
103	3-257-892-12	SPRING (DAMPER), COIL	
104	3-257-892-01	SPRING (DAMPER), COIL	
105	2-345-767-11	SPRING (KF60), TENSION	
106	3-259-033-01	DAMPER (S)	
107	3-352-758-31	SCREW (M1.7X2.5), TOOTHED LOCK	
108	A-1082-772-A	SERVO BOARD, COMPLETE	
109	X-3384-088-2	LEVER (L) ASSY	
110	X-3384-089-2	LEVER (R) ASSY	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-4. CD MECHANISM SECTION (2)
(MG-611TA-186//Q)

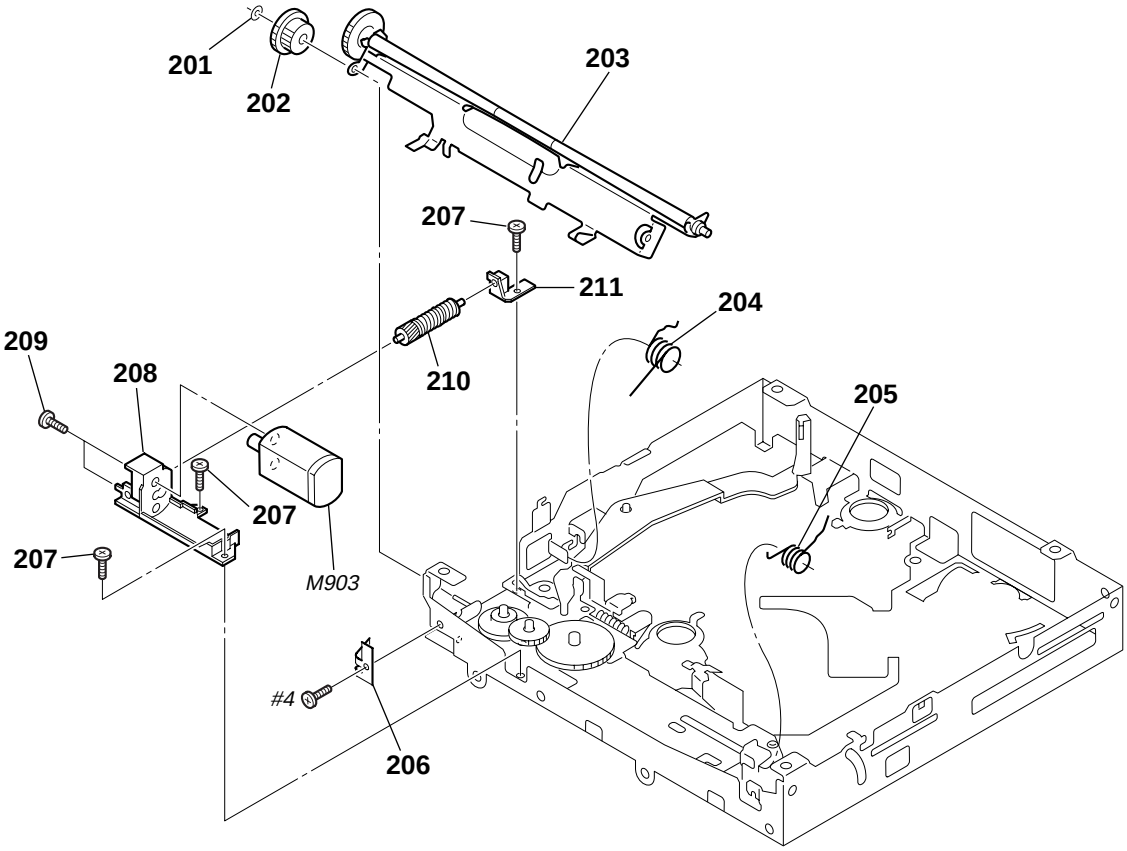


The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
151	A-1075-644-A	CHASSIS (OP) COMPLETE ASSY	
152	3-316-938-91	SCREW (B1.4X5), TAPPING	
⚠153	8-820-207-12	OPTICAL PICK-UP (KSS1000E/K1RP)	
154	A-1075-645-A	CHASSIS (OP) SUB ASSY (including M901)	
155	A-3372-449-A	ARM SUB ASSY, CHUCKING	
156	A-3372-446-A	LEVER (SL) SUB ASSY	

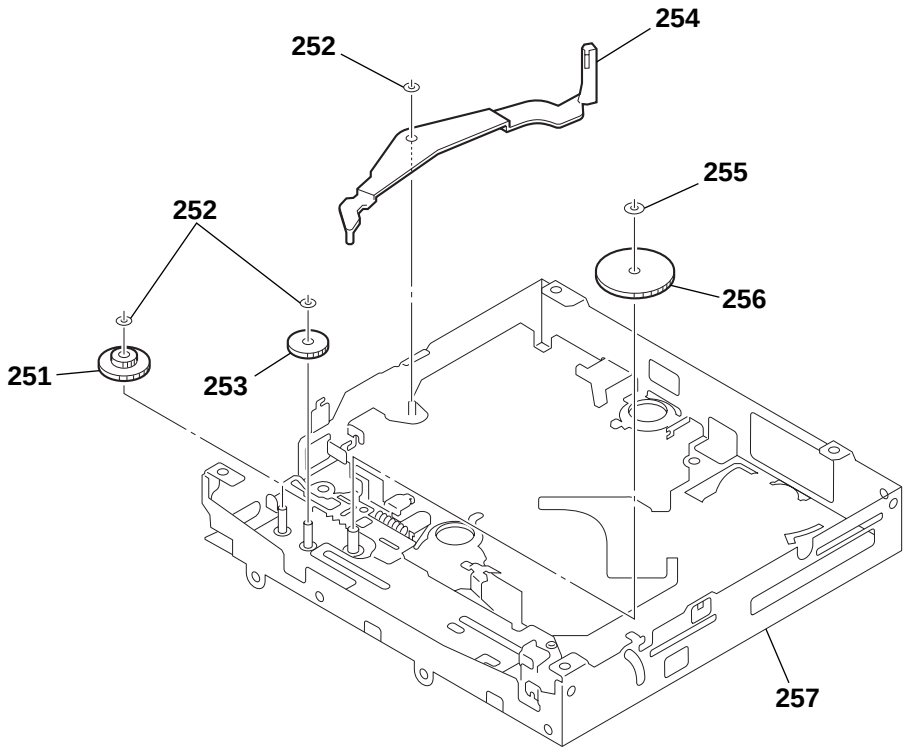
Ref. No.	Part No.	Description	Remark
157	X-3384-090-2	LEVER (SL) ASSY	
158	3-264-165-12	SCREW	
M902	A-3372-447-A	MOTOR ASSY, SL (SLED)	
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)	
#5	7-627-850-77	SCREW, PRECISION +P 1.4X1.8	

4-5. CD MECHANISM SECTION (3)
(MG-611TA-186//Q)



Ref. No.	Part No.	Description	Remark
201	3-348-993-01	WASHER	
202	2-186-699-01	GEAR (RA1)	
203	A-1075-641-A	ARM ASSY, ROLLER	
204	3-259-455-12	SPRING (RAL)	
205	3-253-713-11	SPRING (RAR)	
206	3-259-469-12	SPRING (LE), LEAF	
207	2-134-636-21	SCREW (M1.7X2.5)	
208	2-186-696-01	BRACKET (LEM-N)	
209	3-345-648-91	SCREW (M1.4), TOOTHED LOCK	
210	A-1083-636-A	GEAR (LE) ASSY	
211	2-186-697-01	BEARING (LEB-N)	
M903	A-1075-643-A	MOTOR ASSY, LE (LOADING)	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-6. CD MECHANISM SECTION (4)
(MG-611TA-186//Q)



Ref. No.	Part No.	Description	Remark
251	2-186-700-01	GEAR (CHK1)	
252	3-344-223-01	WASHER	
253	3-259-470-11	GEAR (LE1)	
254	3-253-755-12	LEVER (D)	
255	3-899-829-01	WASHER (SLIT)	
256	3-259-032-01	GEAR (LE2)	
257	A-1075-640-A	CHASSIS (M) BLOCK ASSY	

KEY

SECTION 5
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
	1-780-095-11	CONDUCTIVE BOARD, CONNECTION			
	1-780-104-11	CONDUCTIVE BOARD, CONNECTION			
		< CAPACITOR >			
C971	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C974	1-216-821-11	METAL CHIP	1K	5%	1/10W
C981	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C982	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C983	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C984	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C986	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
		< CONNECTOR >			
CN901	1-817-158-21	PLUG, CONNECTOR 14P			
		< DIODE >			
D901	6-500-886-01	DIODE RSA6.1ENTR			
D902	8-719-056-93	DIODE UDZ-TE-17-18B			
D981	8-719-056-82	DIODE UDZ-TE-17-6.2B			
D983	8-719-081-97	DIODE MMDL914T1			
		< IC >			
IC901	6-707-064-01	IC LC75876WH-US-E			
IC971	6-600-163-01	IC RS-770 (IR)			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-805-760-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< DIODE >			
LED901	6-500-450-01	LED CL-195SR-CD-T (OFF)			
LED902	6-500-450-01	LED CL-195SR-CD-T (SOURCE)			
LED903	6-500-450-01	LED CL-195SR-CD-T (MODE)			
LED904	6-500-450-01	LED CL-195SR-CD-T (VOL –)			
LED905	6-500-450-01	LED CL-195SR-CD-T (ATT)			
LED906	6-500-450-01	LED CL-195SR-CD-T (VOL +)			
LED907	6-500-450-01	LED CL-195SR-CD-T (SEL)			
LED910	6-500-450-01	LED CL-195SR-CD-T (EQ3)			
LED911	6-500-450-01	LED CL-195SR-CD-T (DSO)			
LED912	6-500-450-01	LED CL-195SR-CD-T (SEEK +/▶▶I ▶▶)			
LED913	6-500-450-01	LED CL-195SR-CD-T (SEEK –/◀◀ I◀◀)			
LED914	6-500-450-01	LED CL-195SR-CD-T (PTY/LIST)			

Ref. No.	Part No.	Description			Remark
LED915	6-500-450-01	LED CL-195SR-CD-T (SENS/BTM)			
LED916	6-500-450-01	LED CL-195SR-CD-T (AF/TA)			
LED917	6-500-450-01	LED CL-195SR-CD-T (6)			
LED918	6-500-450-01	LED CL-195SR-CD-T (5)			
LED919	6-500-450-01	LED CL-195SR-CD-T (4/SHUF)			
LED920	6-500-450-01	LED CL-195SR-CD-T (3/REP)			
LED921	6-500-450-01	LED CL-195SR-CD-T (2,GP/DISC +)			
LED922	6-500-450-01	LED CL-195SR-CD-T (1,GP/DISC –)			
LED923	6-500-450-01	LED CL-195SR-CD-T (DSPL)			
LED961	6-501-062-01	LED NSCW505CT-AST (LCD BACK LIGHT-R)			
LED962	6-501-062-01	LED NSCW505CT-AST (LCD BACK LIGHT-L)			
		< TRANSISTOR >			
Q961	6-551-244-01	TRANSISTOR MUN2233T1G			
		< RESISTOR >			
R901	1-216-819-11	METAL CHIP	680	5%	1/10W
R902	1-216-819-11	METAL CHIP	680	5%	1/10W
R903	1-216-819-11	METAL CHIP	680	5%	1/10W
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R905	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R906	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R907	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R908	1-216-819-11	METAL CHIP	680	5%	1/10W
R909	1-216-819-11	METAL CHIP	680	5%	1/10W
R910	1-216-819-11	METAL CHIP	680	5%	1/10W
R911	1-216-821-11	METAL CHIP	1K	5%	1/10W
R912	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R913	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R914	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R915	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R916	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R917	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R918	1-216-833-11	METAL CHIP	10K	5%	1/10W
R919	1-216-835-11	METAL CHIP	15K	5%	1/10W
R920	1-216-837-11	METAL CHIP	22K	5%	1/10W
R921	1-216-809-11	METAL CHIP	100	5%	1/10W
R922	1-216-807-11	METAL CHIP	68	5%	1/10W
R923	1-216-805-11	METAL CHIP	47	5%	1/10W
R927	1-216-029-00	RES-CHIP	150	5%	1/10W
R928	1-216-029-00	RES-CHIP	150	5%	1/10W
R930	1-216-031-00	RES-CHIP	180	5%	1/10W
R931	1-216-031-00	RES-CHIP	180	5%	1/10W
R932	1-216-031-00	RES-CHIP	180	5%	1/10W

Ref. No.	Part No.	Description			Remark
R957	1-216-029-00	RES-CHIP	150	5%	1/10W
R958	1-216-029-00	RES-CHIP	150	5%	1/10W
R963	1-216-029-00	RES-CHIP	150	5%	1/10W
R964	1-216-029-00	RES-CHIP	150	5%	1/10W
R969	1-216-817-11	METAL CHIP	470	5%	1/10W
R971	1-216-821-11	METAL CHIP	1K	5%	1/10W
R972	1-216-809-11	METAL CHIP	100	5%	1/10W
R973	1-216-813-11	METAL CHIP	220	5%	1/10W
R975	1-216-817-11	METAL CHIP	470	5%	1/10W
R976	1-216-817-11	METAL CHIP	470	5%	1/10W
R977	1-216-817-11	METAL CHIP	470	5%	1/10W
R978	1-216-817-11	METAL CHIP	470	5%	1/10W
R979	1-216-817-11	METAL CHIP	470	5%	1/10W
R980	1-216-817-11	METAL CHIP	470	5%	1/10W
R981	1-216-809-11	METAL CHIP	100	5%	1/10W
R982	1-216-809-11	METAL CHIP	100	5%	1/10W
R983	1-216-809-11	METAL CHIP	100	5%	1/10W
R985	1-216-864-11	SHORT CHIP	0		
R990	1-216-857-11	METAL CHIP	1M	5%	1/10W
R996	1-216-864-11	SHORT CHIP	0		
		< SWITCH >			
S901	1-786-653-11	SWITCH, TACTILE (OFF)			
S902	1-786-653-11	SWITCH, TACTILE (SOURCE)			
S903	1-786-653-11	SWITCH, TACTILE (MODE)			
S904	1-786-653-11	SWITCH, TACTILE (VOL –)			
S905	1-786-653-11	SWITCH, TACTILE (ATT)			
S906	1-786-653-11	SWITCH, TACTILE (VOL +)			
S907	1-786-653-11	SWITCH, TACTILE (SEL)			
S910	1-786-653-11	SWITCH, TACTILE (EQ3)			
S911	1-786-653-11	SWITCH, TACTILE (DSO)			
S912	1-786-653-11	SWITCH, TACTILE (SEEK +/▶▶I ▶▶)			
S913	1-786-653-11	SWITCH, TACTILE (SEEK –/◀◀ I◀◀)			
S914	1-786-653-11	SWITCH, TACTILE (PTY/LIST)			
S915	1-786-653-11	SWITCH, TACTILE (SENS/BTM)			
S916	1-786-653-11	SWITCH, TACTILE (AF/TA)			
S917	1-786-653-11	SWITCH, TACTILE (6)			
S918	1-786-653-11	SWITCH, TACTILE (5)			
S919	1-786-653-11	SWITCH, TACTILE (4/SHUF)			
S920	1-786-653-11	SWITCH, TACTILE (3/REP)			
S921	1-786-653-11	SWITCH, TACTILE (2,GP/DISC +)			
S922	1-786-653-11	SWITCH, TACTILE (1,GP/DISC –)			
S923	1-786-653-11	SWITCH, TACTILE (DSPL)			
**********					
	A-1085-118-A	MAIN BOARD, COMPLETE			
		**********			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-126-963-11	ELECT	4.7uF	20%	50V
C2	1-126-947-11	ELECT	47uF	20%	35V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C5	1-126-947-11	ELECT	47uF	20%	35V
C7	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C8	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C9	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C14	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C50	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C51	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C52	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C53	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C54	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C56	1-164-237-11	CERAMIC CHIP	16PF	5%	50V
C57	1-164-185-11	CERAMIC CHIP	13PF	5%	50V
C58	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C60	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C61	1-126-947-11	ELECT	47uF	20%	35V
C62	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C63	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C64	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C301	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C303	1-128-551-11	ELECT	22uF	20%	63V
C304	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C306	1-126-964-11	ELECT	10uF	20%	50V
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C310	1-126-916-11	ELECT	1000uF	20%	6.3V
C312	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C313	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C316	1-126-964-11	ELECT	10uF	20%	50V
C317	1-126-961-11	ELECT	2.2uF	20%	50V
C318	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C319	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C323	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C324	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C329	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C361	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C362	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C363	1-126-960-11	ELECT	1uF	20%	50V
C364	1-126-960-11	ELECT	1uF	20%	50V
C365	1-126-960-11	ELECT	1uF	20%	50V
C367	1-126-960-11	ELECT	1uF	20%	50V
C401	1-104-665-11	ELECT	100uF	20%	25V
C402	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C403	1-126-934-11	ELECT	220uF	20%	16V
C405	1-128-551-11	ELECT	22uF	20%	63V
C410	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C412	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C413	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C414	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C417	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C418	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C419	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C421	1-126-791-11	ELECT	10uF	20%	35V
C422	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C423	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C431	1-126-791-11	ELECT	10uF	20%	35V

MAIN

Ref. No.	Part No.	Description			Remark
C432	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C441	1-126-791-11	ELECT	10uF	20%	35V
C442	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C443	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C451	1-126-791-11	ELECT	10uF	20%	35V
C452	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C461	1-126-791-11	ELECT	10uF	20%	35V
C462	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C471	1-126-791-11	ELECT	10uF	20%	35V
C472	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C480	1-136-154-00	FILM	0.012uF	5%	50V
C481	1-136-154-00	FILM	0.012uF	5%	50V
C482	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C483	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C484	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C485	1-104-665-11	ELECT	100uF	20%	25V
C486	1-126-964-11	ELECT	10uF	20%	50V
C491	1-126-947-11	ELECT	47uF	20%	35V
C501	1-126-924-11	ELECT	330uF	20%	10V
C502	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C503	1-104-665-11	ELECT	100uF	20%	25V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C505	1-104-665-11	ELECT	100uF	20%	25V
C506	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C507	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C508	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C509	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C511	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C515	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C516	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C519	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C600	1-126-935-11	ELECT	470uF	20%	16V
C601	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-131-868-81	ELECT	3300uF	20%	16V
C702	1-126-960-11	ELECT	1uF	20%	50V
C704	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C705	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C901	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C902	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN300	1-774-701-21	PIN, CONNECTOR 16P			
CN350	1-817-536-11	CONNECTOR, BOARD TO BOARD 28P			
* CN701	1-569-908-11	SOCKET, CONNECTOR 14P			
CNJ400	1-580-907-41	PLUG, CONNECTOR (BUS CONTROL IN)			
		< DIODE >			
D2	8-719-036-94	DIODE	RD5.6SB-T1		
D101	6-500-886-01	DIODE	RSA6.1ENTR		
D102	6-500-886-01	DIODE	RSA6.1ENTR		
D106	8-719-056-93	DIODE	UDZ-TE-17-18B		
D107	8-719-056-93	DIODE	UDZ-TE-17-18B		
D301	6-500-522-01	DIODE	10EDB40-TA1B2		
D302	6-500-522-01	DIODE	10EDB40-TA1B2		
D303	6-500-522-01	DIODE	10EDB40-TA1B2		
D304	6-500-522-01	DIODE	10EDB40-TA1B2		

Ref. No.	Part No.	Description	Remark
D305	6-500-522-01	DIODE 10EDB40-TA1B2	
D306	6-500-522-01	DIODE 10EDB40-TA1B2	
D307	6-500-522-01	DIODE 10EDB40-TA1B2	
D308	6-500-522-01	DIODE 10EDB40-TA1B2	
D309	6-500-522-01	DIODE 10EDB40-TA1B2	
D310	6-500-522-01	DIODE 10EDB40-TA1B2	
D311	6-500-522-01	DIODE 10EDB40-TA1B2	
D312	6-500-522-01	DIODE 10EDB40-TA1B2	
D400	6-501-013-01	DIODE BAT54ALT1G	
D491	8-719-081-97	DIODE MMDL914T1	
D493	6-501-051-01	DIODE BAT54CLT1G	
D501	6-501-013-01	DIODE BAT54ALT1G	
D502	6-500-137-01	DIODE BAT54HT1	
D511	6-501-051-01	DIODE BAT54CLT1G	
D602	8-719-056-93	DIODE UDZ-TE-17-18B	
D603	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D604	8-719-056-93	DIODE UDZ-TE-17-18B	
D605	8-719-056-93	DIODE UDZ-TE-17-18B	
D606	8-719-072-70	DIODE MA2ZD14001S0	
D607	8-719-049-38	DIODE 1N5404TU	
D701	8-719-056-93	DIODE UDZ-TE-17-18B	
D702	8-719-056-93	DIODE UDZ-TE-17-18B	
D703	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D704	8-719-056-93	DIODE UDZ-TE-17-18B	
D903	8-719-056-93	DIODE UDZ-TE-17-18B	
		< JUMPER RESISTOR >	
FB401	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB402	1-216-864-11	SHORT CHIP 0	
FB403	1-469-876-11	INDUCTOR, FERRITE BEAD	
FB404	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB405	1-216-864-11	SHORT CHIP 0	
FB406	1-216-864-11	SHORT CHIP 0	
FB407	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB408	1-469-876-11	INDUCTOR, FERRITE BEAD	
		< IC >	
IC50	6-803-747-01	IC TDA7333013TR	
IC300	6-705-359-02	IC TDA8588AJ/N2/R1	
IC401	6-707-303-01	IC TDA7419TR	
IC501	6-805-064-01	IC MB90487APF-G-123-BNDE1	
IC502	6-705-373-01	IC MM3123DPLE	
IC601	6-703-884-01	IC BA8271F-E2	
IC602	8-759-659-13	IC PST3428UL	
		< JACK >	
J1	1-815-185-13	JACK (ANTENNA)	
J370	1-566-822-41	JACK (REMOTE IN)	
J451	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN, AUDIO OUT REAR/FRONT)	
		< JUMPER RESISTOR >	
JC1	1-216-295-11	SHORT CHIP 0	
JC3	1-216-864-11	SHORT CHIP 0	
JC4	1-216-864-11	SHORT CHIP 0	
JC5	1-216-296-11	SHORT CHIP 0	
JC7	1-216-296-11	SHORT CHIP 0	
JC300	1-469-844-11	INDUCTOR 2.2uH	

Ref. No.	Part No.	Description			Remark
JC301	1-469-844-11	INDUCTOR	2.2uH		
JC302	1-216-296-11	SHORT CHIP	0		
JC350	1-216-296-11	SHORT CHIP	0		
JC420	1-216-864-11	SHORT CHIP	0		
JC430	1-216-296-11	SHORT CHIP	0		
JC490	1-216-296-11	SHORT CHIP	0		
JC491	1-216-296-11	SHORT CHIP	0		
JC501	1-216-296-11	SHORT CHIP	0		
JC502	1-216-296-11	SHORT CHIP	0		
JC503	1-216-296-11	SHORT CHIP	0		
JC504	1-216-864-11	SHORT CHIP	0		
JC505	1-216-864-11	SHORT CHIP	0		
JC506	1-216-864-11	SHORT CHIP	0		
JC507	1-216-864-11	SHORT CHIP	0		
JC508	1-216-296-11	SHORT CHIP	0		
JC509	1-216-296-11	SHORT CHIP	0		
JC511	1-216-296-11	SHORT CHIP	0		
JC512	1-216-296-11	SHORT CHIP	0		
JC515	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
JC600	1-216-864-11	SHORT CHIP	0		
JC601	1-216-864-11	SHORT CHIP	0		
JC999	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L1	1-216-295-11	SHORT CHIP	0		
L2	1-414-595-11	INDUCTOR, FERRITE BEAD			
L3	1-414-595-11	INDUCTOR, FERRITE BEAD			
L4	1-469-844-11	INDUCTOR	2.2uH		
L300	1-456-617-11	COIL, CHOKE			
L301	1-216-864-11	SHORT CHIP	0		
L302	1-216-864-11	SHORT CHIP	0		
L303	1-216-864-11	SHORT CHIP	0		
L500	1-469-844-11	INDUCTOR	2.2uH		
		< TRANSISTOR >			
Q1	8-729-421-22	TRANSISTOR	UN2211		
Q3	8-729-920-85	TRANSISTOR	2SD1664-QR		
Q50	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q420	6-551-070-01	TRANSISTOR	KRC283S-B-RPK/P		
Q430	6-551-070-01	TRANSISTOR	KRC283S-B-RPK/P		
Q440	6-551-070-01	TRANSISTOR	KRC283S-B-RPK/P		
Q450	6-551-070-01	TRANSISTOR	KRC283S-B-RPK/P		
Q460	6-551-070-01	TRANSISTOR	KRC283S-B-RPK/P		
Q470	6-551-070-01	TRANSISTOR	KRC283S-B-RPK/P		
Q491	8-729-424-08	TRANSISTOR	UN2111		
Q492	8-729-421-22	TRANSISTOR	UN2211		
Q501	8-729-424-08	TRANSISTOR	UN2111		
Q589	8-729-421-22	TRANSISTOR	UN2211		
Q590	8-729-424-08	TRANSISTOR	UN2111		
Q600	8-729-047-76	TRANSISTOR	FMC2A-T148		
Q601	8-729-424-08	TRANSISTOR	UN2111		
Q605	8-729-421-22	TRANSISTOR	UN2211		
Q701	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q702	8-729-010-25	TRANSISTOR	MSD601-RT1		
		< RESISTOR >			
R1	1-216-809-11	METAL CHIP	100	5%	1/10W
R2	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3	1-216-843-11	METAL CHIP	68K	5%	1/10W
R4	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5	1-216-843-11	METAL CHIP	68K	5%	1/10W
R6	1-414-595-11	INDUCTOR, FERRITE BEAD			
R7	1-414-595-11	INDUCTOR, FERRITE BEAD			
R8	1-216-839-11	METAL CHIP	33K	5%	1/10W
R9	1-216-843-11	METAL CHIP	68K	5%	1/10W
R10	1-216-821-11	METAL CHIP	1K	5%	1/10W
R11	1-216-864-11	SHORT CHIP	0		
R12	1-216-809-11	METAL CHIP	100	5%	1/10W
R13	1-216-809-11	METAL CHIP	100	5%	1/10W
R14	1-216-864-11	SHORT CHIP	0		
R52	1-216-845-11	METAL CHIP	100K	5%	1/10W
R53	1-216-797-11	METAL CHIP	10	5%	1/10W
R54	1-414-595-11	INDUCTOR, FERRITE BEAD			
R55	1-414-595-11	INDUCTOR, FERRITE BEAD			
R57	1-216-833-11	METAL CHIP	10K	5%	1/10W
R58	1-216-821-11	METAL CHIP	1K	5%	1/10W
R301	1-216-809-11	METAL CHIP	100	5%	1/10W
R302	1-216-841-11	METAL CHIP	47K	5%	1/10W
R351	1-216-821-11	METAL CHIP	1K	5%	1/10W
R355	1-216-833-11	METAL CHIP	10K	5%	1/10W
R356	1-216-833-11	METAL CHIP	10K	5%	1/10W
R357	1-216-821-11	METAL CHIP	1K	5%	1/10W
R358	1-216-821-11	METAL CHIP	1K	5%	1/10W
R359	1-216-864-11	SHORT CHIP	0		
R360	1-216-864-11	SHORT CHIP	0		
R370	1-216-809-11	METAL CHIP	100	5%	1/10W
R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R401	1-216-821-11	METAL CHIP	1K	5%	1/10W
R402	1-216-821-11	METAL CHIP	1K	5%	1/10W
R420	1-216-809-11	METAL CHIP	100	5%	1/10W
R421	1-216-809-11	METAL CHIP	100	5%	1/10W
R422	1-216-841-11	METAL CHIP	47K	5%	1/10W
R423	1-216-864-11	SHORT CHIP	0		
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R432	1-216-841-11	METAL CHIP	47K	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-841-11	METAL CHIP	47K	5%	1/10W
R443	1-216-864-11	SHORT CHIP	0		
R450	1-247-807-31	CARBON	100	5%	1/4W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-841-11	METAL CHIP	47K	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R462	1-216-841-11	METAL CHIP	47K	5%	1/10W
R463	1-216-864-11	SHORT CHIP	0		
R470	1-216-809-11	METAL CHIP	100	5%	1/10W
R471	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-841-11	METAL CHIP	47K	5%	1/10W
R473	1-216-864-11	SHORT CHIP	0		
R480	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-833-11	METAL CHIP	10K	5%	1/10W
R482	1-216-833-11	METAL CHIP	10K	5%	1/10W
R483	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-805-11	METAL CHIP	47	5%	1/10W

MAIN **SENSOR** **SERVO**

Ref. No.	Part No.	Description			Remark
R500	1-216-817-11	METAL CHIP	470	5%	1/10W
R501	1-216-845-11	METAL CHIP	100K	5%	1/10W
R505	1-216-845-11	METAL CHIP	100K	5%	1/10W
R506	1-216-845-11	METAL CHIP	100K	5%	1/10W
R509	1-216-845-11	METAL CHIP	100K	5%	1/10W
R510	1-216-833-11	METAL CHIP	10K	5%	1/10W
R512	1-216-845-11	METAL CHIP	100K	5%	1/10W
R514	1-216-809-11	METAL CHIP	100	5%	1/10W
R515	1-216-809-11	METAL CHIP	100	5%	1/10W
R516	1-216-809-11	METAL CHIP	100	5%	1/10W
R517	1-216-845-11	METAL CHIP	100K	5%	1/10W
R518	1-216-845-11	METAL CHIP	100K	5%	1/10W
R519	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R520	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R522	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R523	1-216-845-11	METAL CHIP	100K	5%	1/10W
R524	1-216-845-11	METAL CHIP	100K	5%	1/10W
R525	1-216-845-11	METAL CHIP	100K	5%	1/10W
R526	1-216-841-11	METAL CHIP	47K	5%	1/10W
R527	1-216-841-11	METAL CHIP	47K	5%	1/10W
R528	1-216-833-11	METAL CHIP	10K	5%	1/10W
R529	1-216-845-11	METAL CHIP	100K	5%	1/10W
R530	1-216-845-11	METAL CHIP	100K	5%	1/10W
R531	1-216-845-11	METAL CHIP	100K	5%	1/10W
R532	1-216-845-11	METAL CHIP	100K	5%	1/10W
R533	1-216-845-11	METAL CHIP	100K	5%	1/10W
R534	1-216-845-11	METAL CHIP	100K	5%	1/10W
R535	1-216-811-11	METAL CHIP	150	5%	1/10W
R536	1-216-864-11	SHORT CHIP	0		
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W
R539	1-216-809-11	METAL CHIP	100	5%	1/10W
R540	1-216-809-11	METAL CHIP	100	5%	1/10W
R541	1-216-841-11	METAL CHIP	47K	5%	1/10W
R542	1-216-845-11	METAL CHIP	100K	5%	1/10W
R543	1-216-845-11	METAL CHIP	100K	5%	1/10W
R544	1-216-845-11	METAL CHIP	100K	5%	1/10W
R546	1-216-845-11	METAL CHIP	100K	5%	1/10W
R547	1-216-809-11	METAL CHIP	100	5%	1/10W
R548	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R549	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R551	1-216-845-11	METAL CHIP	100K	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W
R554	1-216-821-11	METAL CHIP	1K	5%	1/10W
R596	1-249-417-11	CARBON	1K	5%	1/4W
R597	1-249-417-11	CARBON	1K	5%	1/4W
R601	1-216-849-11	METAL CHIP	220K	5%	1/10W
R602	1-216-849-11	METAL CHIP	220K	5%	1/10W
R603	1-216-821-11	METAL CHIP	1K	5%	1/10W
R604	1-216-835-11	METAL CHIP	15K	5%	1/10W
R606	1-216-821-11	METAL CHIP	1K	5%	1/10W
R607	1-216-821-11	METAL CHIP	1K	5%	1/10W
R608	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R610	1-216-809-11	METAL CHIP	100	5%	1/10W
R611	1-216-809-11	METAL CHIP	100	5%	1/10W
R700	1-249-425-11	CARBON	4.7K	5%	1/4W
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W
R702	1-216-841-11	METAL CHIP	47K	5%	1/10W
R703	1-216-833-11	METAL CHIP	10K	5%	1/10W
R704	1-216-833-11	METAL CHIP	10K	5%	1/10W
R705	1-249-425-11	CARBON	4.7K	5%	1/4W
R706	1-216-841-11	METAL CHIP	47K	5%	1/10W
R707	1-216-841-11	METAL CHIP	47K	5%	1/10W
R708	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R709	1-216-821-11	METAL CHIP	1K	5%	1/10W
R710	1-249-425-11	CARBON	4.7K	5%	1/4W
		< SWITCH >			
S102	1-786-458-11	SWITCH, PUSH (1 KEY) (NOSE DET)			
S103	1-692-431-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR (POSITIVE) >			
TH400	1-803-350-21	THERMISTOR, POSITIVE			
		< TUNER >			
TU1	A-3220-961-A	TUNER UNIT (TUX-032)			
		< VIBRATOR >			
X50	1-813-532-11	VIBRATOR, CRYSTAL (8.664MHz)			
X500	1-813-524-21	VIBRATOR, CERAMIC (18.432MHz)			
X501	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
		SENSOR BOARD			
		**********			
		< SWITCH >			
SW2	1-529-566-61	SWITCH, PUSH (1 KEY) (SELF)			
SW3	1-529-566-61	SWITCH, PUSH (1 KEY) (DISC IN)			
**********					
	A-1082-772-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C4	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C5	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C9	1-104-609-11	ELECT CHIP	100uF	20%	4V
C10	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C13	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C16	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C17	1-162-925-11	CERAMIC CHIP	68PF	5%	50V
C18	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C19	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C20	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C21	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C22	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C23	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C24	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C27	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C28	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C29	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C31	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C32	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C33	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V

Ref. No.	Part No.	Description			Remark
C34	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C35	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C36	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C37	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C38	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C39	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C40	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C41	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C42	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C43	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C45	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C47	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C48	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C49	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C51	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C52	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C53	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C57	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C58	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C59	1-112-195-11	ELECT	47uF	20%	4V
C60	1-112-195-11	ELECT	47uF	20%	4V
C61	1-126-208-21	ELECT CHIP	47uF	20%	4V
C62	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C64	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C65	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C67	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C72	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C80	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C101	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C102	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C103	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C105	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C106	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
		< CONNECTOR >			
CN1	1-691-380-21	CONNECTOR, FFC/FPC 16P			
CN2	1-817-275-21	CONNECTOR, BOARD TO BOARD 28P			
		< JUMPER RESISTOR >			
FB2	1-216-864-11	SHORT CHIP	0		
FB3	1-216-864-11	SHORT CHIP	0		
FB4	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC1	6-707-327-01	IC BA5968FP-E2			
IC2	6-707-328-01	IC TC94A60MFG-301			
IC3	6-805-086-02	IC MB90487APFV-G-142-BNDE1			
IC6	6-705-364-01	IC R1114N151D-TR-FA			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q2	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q3	8-729-928-90	TRANSISTOR DTC114EE			
		< RESISTOR >			
R1	1-218-941-81	RES-CHIP	100	5%	1/16W
R2	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R3	1-208-912-11	METAL CHIP	11K	0.5%	1/16W

Ref. No.	Part No.	Description			Remark
R4	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6	1-218-929-11	RES-CHIP	10	5%	1/16W
R7	1-218-929-11	RES-CHIP	10	5%	1/16W
R8	1-218-967-11	RES-CHIP	15K	5%	1/16W
R9	1-218-967-11	RES-CHIP	15K	5%	1/16W
R10	1-218-965-11	RES-CHIP	10K	5%	1/16W
R11	1-218-965-11	RES-CHIP	10K	5%	1/16W
R12	1-218-977-11	RES-CHIP	100K	5%	1/16W
R13	1-218-969-11	RES-CHIP	22K	5%	1/16W
R16	1-218-967-11	RES-CHIP	15K	5%	1/16W
R17	1-218-973-11	RES-CHIP	47K	5%	1/16W
R19	1-218-967-11	RES-CHIP	15K	5%	1/16W
R21	1-218-973-11	RES-CHIP	47K	5%	1/16W
R22	1-218-990-11	SHORT CHIP	0		
R23	1-218-979-11	RES-CHIP	150K	5%	1/16W
R24	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R25	1-218-990-11	SHORT CHIP	0		
R26	1-218-941-81	RES-CHIP	100	5%	1/16W
R28	1-218-947-11	RES-CHIP	330	5%	1/16W
R40	1-218-941-81	RES-CHIP	100	5%	1/16W
R41	1-218-977-11	RES-CHIP	100K	5%	1/16W
R42	1-218-977-11	RES-CHIP	100K	5%	1/16W
R43	1-218-941-81	RES-CHIP	100	5%	1/16W
R44	1-218-941-81	RES-CHIP	100	5%	1/16W
R45	1-218-989-11	RES-CHIP	1M	5%	1/16W
R46	1-218-947-11	RES-CHIP	330	5%	1/16W
R47	1-218-977-11	RES-CHIP	100K	5%	1/16W
R48	1-218-941-81	RES-CHIP	100	5%	1/16W
R49	1-218-941-81	RES-CHIP	100	5%	1/16W
R50	1-218-941-81	RES-CHIP	100	5%	1/16W
R51	1-218-941-81	RES-CHIP	100	5%	1/16W
R52	1-218-945-11	RES-CHIP	220	5%	1/16W
R53	1-218-941-81	RES-CHIP	100	5%	1/16W
R54	1-218-941-81	RES-CHIP	100	5%	1/16W
R55	1-218-977-11	RES-CHIP	100K	5%	1/16W
R56	1-218-941-81	RES-CHIP	100	5%	1/16W
R57	1-218-941-81	RES-CHIP	100	5%	1/16W
R58	1-218-941-81	RES-CHIP	100	5%	1/16W
R59	1-218-977-11	RES-CHIP	100K	5%	1/16W
R60	1-218-977-11	RES-CHIP	100K	5%	1/16W
R61	1-218-977-11	RES-CHIP	100K	5%	1/16W
R62	1-218-977-11	RES-CHIP	100K	5%	1/16W
R63	1-218-977-11	RES-CHIP	100K	5%	1/16W
R64	1-218-977-11	RES-CHIP	100K	5%	1/16W
R65	1-218-941-81	RES-CHIP	100	5%	1/16W
R66	1-218-941-81	RES-CHIP	100	5%	1/16W
R67	1-218-941-81	RES-CHIP	100	5%	1/16W
R68	1-218-941-81	RES-CHIP	100	5%	1/16W
R69	1-218-941-81	RES-CHIP	100	5%	1/16W
R70	1-218-941-81	RES-CHIP	100	5%	1/16W
R71	1-220-804-11	RES-CHIP	2.2M	5%	1/16W
R72	1-218-941-81	RES-CHIP	100	5%	1/16W
R73	1-218-973-11	RES-CHIP	47K	5%	1/16W
R74	1-218-941-81	RES-CHIP	100	5%	1/16W
R77	1-218-941-81	RES-CHIP	100	5%	1/16W
R78	1-218-941-81	RES-CHIP	100	5%	1/16W
R80	1-218-941-81	RES-CHIP	100	5%	1/16W

SERVO **SUB**

Ref. No.	Part No.	Description			Remark
R81	1-218-973-11	RES-CHIP	47K	5%	1/16W
R82	1-218-973-11	RES-CHIP	47K	5%	1/16W
R83	1-218-973-11	RES-CHIP	47K	5%	1/16W
R84	1-218-953-11	RES-CHIP	1K	5%	1/16W
R86	1-218-969-11	RES-CHIP	22K	5%	1/16W
R90	1-218-941-81	RES-CHIP	100	5%	1/16W
R91	1-218-941-81	RES-CHIP	100	5%	1/16W
R100	1-220-200-81	RES-CHIP	30K	5%	1/16W
R101	1-218-971-11	RES-CHIP	33K	5%	1/16W
R112	1-218-990-11	SHORT CHIP	0		
R113	1-218-990-11	SHORT CHIP	0		
R116	1-218-977-11	RES-CHIP	100K	5%	1/16W
R117	1-218-977-11	RES-CHIP	100K	5%	1/16W
R118	1-218-977-11	RES-CHIP	100K	5%	1/16W
R119	1-218-977-11	RES-CHIP	100K	5%	1/16W
R120	1-218-990-11	SHORT CHIP	0		
R121	1-218-990-11	SHORT CHIP	0		
R122	1-218-990-11	SHORT CHIP	0		
R123	1-218-990-11	SHORT CHIP	0		
R125	1-218-941-81	RES-CHIP	100	5%	1/16W
R126	1-218-941-81	RES-CHIP	100	5%	1/16W
R127	1-218-941-81	RES-CHIP	100	5%	1/16W
R128	1-218-941-81	RES-CHIP	100	5%	1/16W
R131	1-216-864-11	SHORT CHIP	0		
R132	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
		< SWITCH >			
SW1	1-529-565-61	SWITCH, PUSH (1 KEY) (DOWN)			
		< VIBRATOR >			
X1	1-813-371-21	VIBRATOR, CERAMIC (12MHz)			
X2	1-795-561-21	VIBRATOR, CERAMIC (16.9344MHz)			

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		SUB BOARD **********			
	1-792-195-31	CABLE, FLEXIBLE FLAT (14 CORE) (CN802)			
		< CONNECTOR >			
CN801	1-817-159-11	SOCKET, CONNECTOR 14P			
		< DIODE >			
LED801	8-719-082-38	LED CL-270SR-C-TS (DOOR IND)			
LED802	6-500-450-01	LED CL-195SR-CD-T (⏏)			
		< RESISTOR >			
R801	1-216-817-11	METAL CHIP	470	5%	1/10W
		< SWITCH >			
S801	1-771-884-31	SWITCH, TACTILE (⏏)			

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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS **********	
12	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
⚠153	8-820-207-12	OPTICAL PICK-UP (KSS1000E/K1RP)	
154	A-1075-645-A	CHASSIS (OP) SUB ASSY (including M901)	
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
M902	A-3372-447-A	MOTOR ASSY, SL (SLED)	
M903	A-1075-643-A	MOTOR ASSY, LE (LOADING)	
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)	

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		ACCESSORIES **********	
	1-479-077-11	REMOTE COMMANDER (RM-X151)	
	2-349-097-11	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH)	
	2-349-098-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN,FRENCH,ITALIAN,DUTCH)	
	2-548-729-01	LID, BATTERY CASE (for RM-X151)	
	X-3385-071-1	CASE ASSY (for FRONT PANEL)	

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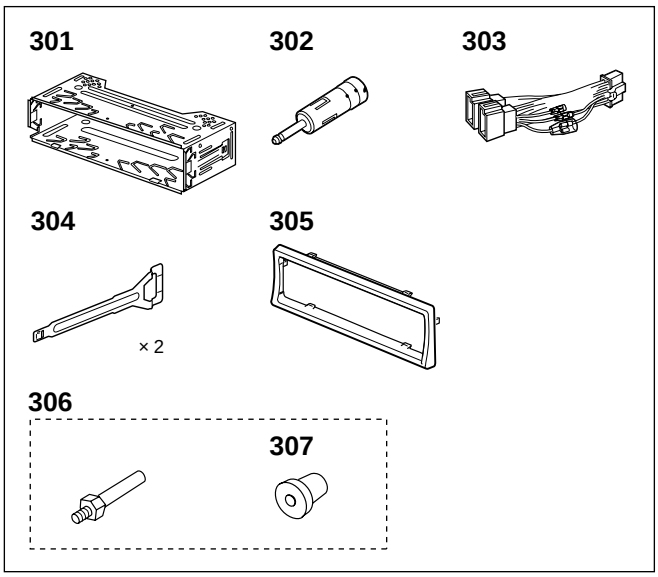
		PARTS FOR INSTALLATION AND CONNECTIONS **********	
301	X-3382-647-1	FRAME ASSY, FITTING	
302	1-465-459-31	ADAPTOR, ANTENNA	
303	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
304	3-246-471-01	KEY (FRAME)	
305	3-260-236-11	COLLAR	
306	X-3382-926-1	SCREW ASSY (BS), FITTING	
307	3-349-410-11	BUSHING	



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.